

Entered at the Post Office, February 3rd, 1891, at New York, as Second-class Matter.  
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Printed for the Editors by E. Scott & Co., 134 West 23d Street, New York.

THE JOURNAL

OF

COMPARATIVE MEDICINE

AND

VETERINARY ARCHIVES.

EDITED BY

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NEW YORK.

OCTOBER, 1893.

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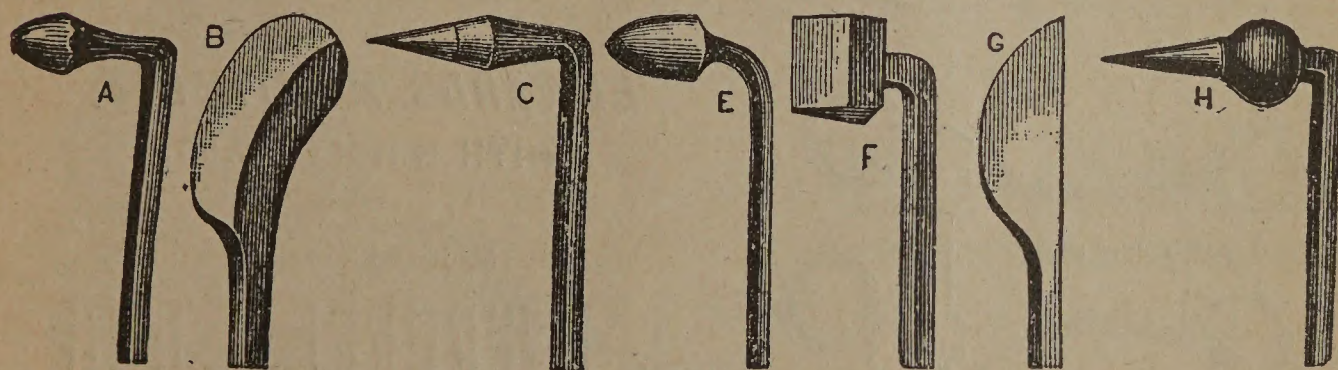
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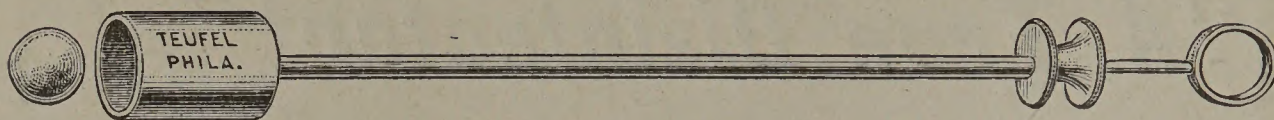
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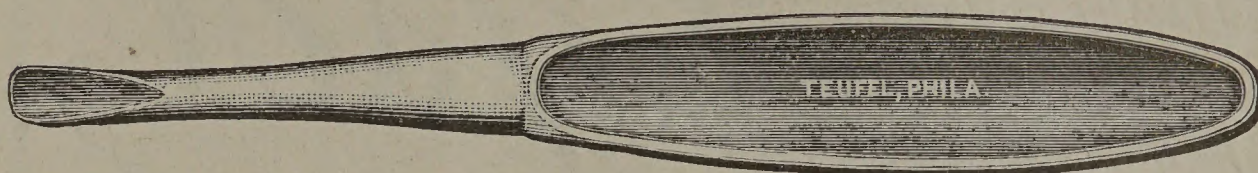


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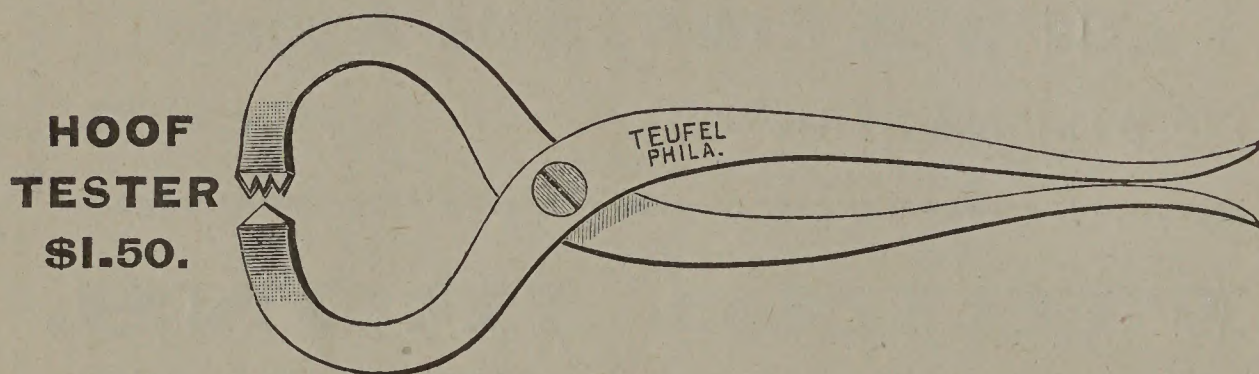


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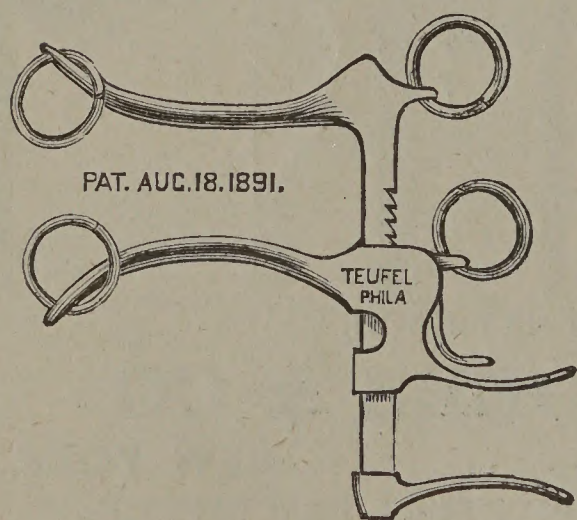
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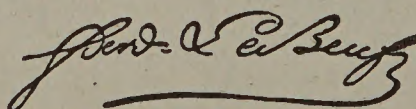
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VOL. XIV.

OCTOBER, 1893.

No. 4.

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## HORSE SHOW, COLUMBIAN EXHIBITION.

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BY A. H. GODFREY.

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At the request of the editors that I should place before their readers my impressions on the Live Stock exhibit at the World's Fair, I submit the following, and trust that it will prove acceptable to at least a few of the lay readers who may occasionally find time to glance over a paragraph or two written in the simple conversational style, as distinguished from the high-class technical matter generally looked for by the learned clientele.

Having been for some years a more or less close observer of the varieties of type which the several breeds of horses present, the first point which struck me forcibly on arrival at the Columbian Exposition was the magnificent opportunity which the Horse Show afforded to make a comparison of the different breeds and to examine the best representatives of each at rest and in action. With this purpose in view I made during the three weeks, commencing August 22, that the show was in progress, daily tours through the stables, held conversations with a majority of the exhibitors with whom I could converse in English, and religiously attended the parade of the several classes before the judges in the arena. I was also enabled, through the courtesy of owners, to take with a small kodak photographs of the leading prize-winners, and I enclose herewith a few prints from film negatives, which I trust will be found of service in illustrating this article.

The Live Stock exhibit consisted of something like two thousand head of cattle and twelve hundred horses and ponies, many of which appeared in the ring in two or more classes, making in all nearly four thousand entries for the authorities to handle. Many of the horses were exhibited by foreign governments and held as



priceless, the same being said of hundreds of the prize cattle put into the ring by their American owners. It is therefore extremely difficult to compute the value of the total exhibit, but rating the animals at the low price of, say two hundred dollars a head, we easily run up into the million, and, I think we might with safety put it at twice that sum. As to general excellence I should say that the stock as a whole compared more than favorably with anything of the sort heretofore shown at European exhibitions, and in some sections the exhibit was the grandest and largest that has ever been brought before the public. This opinion is based upon the spontaneous exclamations of competent judges and well-known breeders who came to the Fair merely as visitors, and, I think, prepared to be disappointed and to return home full of adverse criticism.

The provision made for the reception, housing, feeding, exercising and showing of this grand collection of animals was surprising, by reason of the simple style of the buildings and the total absence of anything like friction in bringing the classes before the judges. All live stock trains deposited their loads on platforms immediately adjoining the stables, and animals were led right into their own stalls without coming in contact with occupants of adjacent barns or passing through any building but the one in which they were assigned.

The stabling consisted of about forty frame buildings, many of the larger being L shaped and about 200x40 feet. the smaller barns being of same width but perhaps 100 feet long. All the barns were filled with stock occupying stalls 10x5 feet, or boxes 10x14 feet, and these were ranged down each side, there being a narrow passage between the head of the stalls and the outer walls for storing and distributing feed, and a centre passageway about 12 feet wide throughout the entire length of each building, so that visitors could promenade conveniently and with perfect safety. Every stable was well lighted by windows opposite alternate stalls, and these, with the end doors, afforded excellent ventilation. Over the stalls was a floor where any of the attendants, who cared to do so, could make up their beds and keep their baggage, etc. An abundance of straw, grain and fodder was provided at low rates and delivered daily as required. Water was conveyed through pipes to troughs placed at convenient intervals. The barns were all cleared up and refuse removed in trucks every morning before visitors arrived on the grounds. The barns were marked Section A, B, C, D, etc., to correspond with the sections in



the catalogue separating the different breeds. The cattle were of course stabled apart from the horses, and the latter were divided so that it was easy to locate any particular breed.

The Live Stock pavilion, where the judging was done, was an immense building, elliptical in form, some 450 feet long and 280 feet wide, containing galleries capable of accommodating probably 10,000 people, and a show ring that must have been not less than 350 feet in length and 200 feet wide. The surface of the ring was deep tanbark laid on cedar blocks. In the centre of the ring was a covered stand having chairs and tables for the judges and clerks. For the entrance and exit of animals there were wide passageways at the ends and sides of the building, while for visitors there were many stairways at intervals round the outside. Underneath the galleries were club rooms for breeders' societies and offices of newspapers, etc.

The judging continued daily for three weeks, between the hours of 10 A. M. and 6 P. M. The horses were shown at one end of the arena, the cattle parading at the other, the outer edge of the entire circle being generally kept clear for speedy horses to show their paces. \$150,000 was awarded in prizes to the competitors by the Exposition Directory, and added to this were several magnificent special prizes offered by the several Live Stock Associations, some of the States defraying expenses for their exhibitors.

The Live Stock exhibit was in charge of the following officials: W. I. Buchanan, Chief Department of Agriculture; Charles F. Mills, Chief Clerk Department of Live Stock; Division A (Cattle), J. B. Dinsmore, Superintendent; Division B (Horses), H. H. Hinds, Marshal of ring; F. J. McMahon, V.S., Chief Veterinarian.

The judges were as follows, except in a few instances where substitutes had to be appointed vice those who were unable to appear, or who were obliged on account of business to leave the grounds before their work was completed:

#### DIVISION A—CATTLE.

Class 1—Short Horn. J. H. Pickrell, Chicago, Ill.; Consulting Judges—H. C. Duncan, Osborne, Ind.; J. T. Gibson, Deerfield, Ont.

Class 2—Hereford. J. A. Funkhouser, Plattsburg, Mo.

Class 3—Aberdeen-Angus. John G. Imboden, Decatur, Ill.

Class 4—Galloway. David McCrae, Guelph, Ont.

Class 5—Devon. Benj. R. Eldridge, Provo City, Utah.



- Class 6—Jersey. Henry V. Alford, Washington, D. C.  
 Class 7—Holstein-Friesian. Thos. B. Wales, Boston, Mass.  
 Class 8—Ayrshire. (Did not get the name.)  
 Class 9—Guernsey. Edward Burnett, Madison, N. J.  
 Class 11—Red Polled. (Did not get the name.)  
 Class 12—Polled Durham. D. H. Branson, Altgers, Pa.  
 Class 13—Dutch Belted. D. H. Branson, Altgers, Pa.  
 Class 14—Brown Swiss. Wm. Andrew, Lake Forest, Ill.

## DIVISION B—HORSES.

- Class 23—French Coach. R. B. Ogilvie, Madison, Wis.  
 Class 24—German Coach. Landstallmeister, Von Oettingen Beberbeck.  
 Class 25—Cleveland Bay. Alex. Galbraith, Janesville, Wis.  
 Class 26—Percheron. Thomas Slatterly, Onarga, Ill.  
 Class 27—Clydesdale. Alex. Weir, Sandelmains, Lanark, Scotland; Consulting Judges—John C. Huston, Blandinsville, Ill.; E. W. Charlton, Duncrief, Ont.  
 Class 28—Shire. Joseph Watson, Beatrice, Neb.  
 Class 29—French Draft. Robt. Graham, Claremont, Ont.  
 Class 30—Belgian. Reiterschafts Director, Von Soldern, Plattenburg.  
 Class 31—Suffolk Punch. Alex. Galbraith, Janesville, Wis.  
 Class 32—Hackney. A. J. Cassatt, Philadelphia, Pa.  
 Class 33—Morgan. R. W. Goodrich, Poultney, Vt.  
 Class 34—Arab. Rev. F. F. Vidal, Suffolk, England.  
 Class 35—Americo-Arab. Rev. F. F. Vidal, Suffolk, England.  
 Class 36—French Trotter. Wm. Bonner, Beaver Dam, Wis.  
 Class 36½—Russian. M. W. Dunham, Wayne, Ill.  
 Class 37—Saddle. Charles L. Bailey, Lexington, Ky.  
 Class 38—Shetland Pony. Eli Elliott, West Liberty, Iowa.  
 Class 39—Jacks and Jennets. Albert Babb, Springfield, Ill.  
 Special Class—Mules. Albert Babb, Springfield, Ill.

Leaving the cattle out of the question, and giving attention only to the horses, I remarked that the first week of the show was given up wholly to heavy draft breeds, the second week to carriage horses, and the last week to the lighter and speedier breeds, with the Shetland ponies and the mules closing the show. The exhibitors, it was noticed, were, generally speaking, from the Middle and Western States and Canada, very few animals, if any, belonging to breeders in the East, or residents of England. The Russian Orloffs, Belgians and German Coachers made up the for-



eign exhibit. A peculiar method of arranging the classes was noticed, the horses five years old or over being all judged together, the four-year-olds together, and so on down to sucklings, the question of height never being considered, and horses lacking size appearing at some disadvantage in consequence. The duties of the veterinarian seemed to be confined to the examination of the horses on entering the grounds and periodical visits to them in their stalls so as to detect disorders or contagious disease. There did not seem to be any system of critical examination of horses for soundness before being turned over to the judges, the veterinarian's advice being simply called for in case the judge did not feel satisfied as to the soundness of an animal in the ring. This resulted in much feeling of hocks, lifting of feet, pressure of throats, and movement of the fingers to try the sight, etc., all of which had a tendency to draw public attention to a horse in a way that there seemed to be little need of. Of course the ring was so large and there were so many animals in the ring at a time that perhaps the visitors on the galleries—and there were often as many as ten thousand seated thereon—could not follow every movement of the judges, and so perhaps examinations which took place may not have caused much trouble. It would have helped matters considerably had the horses been passed upon by the veterinarian before they entered the arena. As it was it appeared, in the heavy classes at least, as though the judges held diplomas and were so keenly alive to all defects that a practitioner's assistance was totally unnecessary.

## CLYDESDALES.

The "feathery legs"—Scotch Clydesdales and English Shire horses—were very much *en evidence*. Of the former there were no less than 187 head, and of the latter 50. In the Clydes, owners made very large entries; for instance, 19 head came from Mr. Ogilvie's farm at Madison, Wis.; over 30 were sent by Mr. N. F. Clarke of St. Cloud, Minn.; as large a number by Mr. Robert Holloway of Alexis, Ill.; 15 by Mr. L. B. Goodrich of State Centre, Iowa, and so on. The competition was, of course, keen in the extreme, and the judging by points carried out with such exactness as to leave the experts at the ringside in doubt up to the very last moment, and after the decisions left them wondering "where they were at." In the Clydes we saw heaviness carried to an extreme, as weight in the collar is their principal essential, but there was a grand "look-out" to these horses, a magnificent crest or arch of the neck, and an alertness about them that testified to



their determination and will power which destroyed all thought of mere beefiness such as one sometimes gets when looking at that most peculiar of animals the "London dray horse," one of which is as wide as his dray or wagon, and pulls a whole brewery behind him. The toppiness of the Clyde was pleasing, and his line from wither to croup over a magnificently turned posterior quarter was beautiful. The shoulder is more beautiful than would be expected in a draft horse where we look for straightness to some extent, but this is counteracted by the power displayed in the conformation of the hind parts, haunch to buttock and stifle joint, or angle of the ilium, ischium and femur, as the professors say when mystifying us. There is a great deal of finish and style about the Clyde, too, which the winner, Mr. Ogilvie's Macqueen, and the second horse, Mr. Goodrich's world-renowned Macclaskie, showed in a remarkable degree. While the older horses were all imported it was noticed that the majority of the yearlings and two-year-olds were bred in this country, and their condition, shapes and action spoke volumes for their American breeders and gave evidence of their being able to compete with honor in "bonnie Scotland," should occasion arise. It was evident, too, that dealers in Clydes had been careful as to their importations, and it is not too much to say that the Clyde has made for himself a great reputation as a producer of perhaps the grandest type of heavy draught horse that this country or any other can require.

#### SHIRES.

The Shire horse, as we see it to-day, is the result of, I may say, centuries of judicious breeding on the part of English farmers and others interested in the strictly agricultural horse. The Flemish stallion put on to the Lincolnshire mare and others of adjacent counties long before Henry VIII lost his temper at the pranks of Anne Boleyn, and a systematic following up of type and perfection of proportion has done wonders, and we see in the Shire a construction well calculated to perform every duty on the farm and make a most economical work horse for the small land owner as well as those who own broad acres. The Shire is extremely deep through the heart, body is roomy, giving space for the "internal machinery," and instead of being "tucked up" he gives one the impression that the "12 quarts" might just as well be served at once as make "two bites at a cherry." The arm and shoulder look as though they were put on for business, not for show, being extremely powerful; the back is short, the line on top straighter



than the Clyde, and the posterior quarter longer. Some of the specimens were not "so near the ground" as the last described, but they were extremely neat and clean as to "understandings," with muscles showing distinctly throughout, and not smothered to such an extent with feather. In weight the largest seemed to approach 2,000 pounds, but the majority ranged in the neighborhood of 1,600 or 1,700 I should think, and seemed to be in the very pink of working and saleable condition at that. The action is energetic and easy, and having no redundance of avoirdupois they are handled quickly. Injudicious early importations have caused this horse to suffer somewhat in the market, but they are now coming to the front with a rush, and after what was seen of them at Chicago, I look forward to some interesting details of sales in the near future.

When a horse walks well he is half sold, and the Shire I should say could catch his customer "in a walk." Mr. G. Brown, of Aurora, Ill., of course, won easily with his magnificent Shire stallion Holland Major, than which, I suppose, there cannot possibly be a better. The second horse, Messrs Burgess Bros.', of Wenona, Ill., Light of the West, rather wider than the winner and unusually heavy, took the eye of the experts over the rest in the class. Mr. A. B. Holbert, of Greeley, Iowa, also made a rich display in the Shire Class, but the two first mentioned had the greatest number to put before the judges, and it was a question with them who would come out with the most money. The Burgess Bros. carried off the prize for best collection consisting of three of either sex, also for best four stallions and best four mares, therefore they were "out of sight" at the finish.

#### PERCHERONS.

The Percherons, which can safely be considered as the most widely known draught horses in America, came out strong at the World's Fair, and in point of quality were more than equal to expectations. One hundred and fifty were shown. The district of La Perche, in Northern France, has certainly given to the world some splendid specimens of the gray horse, and American dealers seem to have obtained quite a respectable collection of the best sort, if we may judge from what appeared in the Chicago show ring—especially those which were shown by Mr. Dunham, of Oaklawn Farm, Wayne, Ill., who carried off about all the prizes worth having in these classes. Whether having their origin in the Norman or Flemish horse, or horse of Brittany with admixture of



Arabian blood, or that of even the Gascony pony, it must be conceded that the Percheron is a good looker, a well made one, and a horse that sells at a glance. He shows an "upstanding" aspect, is well topped, well rounded, is in capital proportion, and both walks and trots quickly, showing usefulness with a turn of speed as a draft horse not surpassed by any other heavy breed. His feet, too, are said to wear well, therefore of all draught breeds handled the Percheron can certainly not be spoken of as "likely to be returned after a short trial." The French Government have long exercised an influence over this breed, supervising the use of stallions and choosing the mares for perpetuation of type, therefore it is not to be wondered at that a ring of these horses show remarkable likeness to each other and a uniformity of excellence. I hope to include a good picture of a champion Percheron stallion in the collection which accompanies this article, because I can by that means convey some idea of the beauty which eighteen stallions of this breed presented when put into line in the aged class. It was a most impressive sight and a picture which only a Rosa Bonheur could do justice to.

#### FRENCH DRAUGHT.

Admitting that France produces many different breeds of horses on the order of the Percheron, but yet distinct from it, I could see no reason for a French Draught Class in the Show, as there was no classification for such fine little horses as the Breton and others from adjacent districts, and it was simply a show of more Percherons, or horses so near to his type as to be taken for him. Mr. Dunham was again successful as an exhibitor, and he really had matters his own way on account of the superiority of his horses.

#### SUFFOLK PUNCHES.

Here we saw the "clean-legged" draft horse from the southern counties of England or to be more exact, indigenous to Suffolk, that has for centuries been noted for straining at a load until it gets down on its knees almost and pulls its heart out. They are a handsome heavy horse, very chunky, low on the leg and with the pulling power well distributed. They are, for the most part, chestnuts with good manes and tails, and this has helped them considerably in the matter of adherence to color, chestnut being notorious for coming through. They can trot and walk too, can Punches, and while, perhaps, the Percheron is their equal in speed—well, well, I was about to say let blood tell, and so I won't say any



more, although I cannot omit to praise these English medium-weight draught horses as most excellent generally useful horses for either city, draft or agricultural purposes. As used in England, one horse in the shafts and a leader in chains, tandem fashion, they make a smart, slick-looking team, can move along at a walk with extraordinary loads without appearing to expend much effort, and as they are topky, well crested, as round as an apple, and possess lots of heart and endurance, it is no wonder they are very extensively used. Mr. Peter Hopley, of Lewis, Iowa, made a magnificent exhibit of these horses, and I understand he is one of the largest, if not the largest, breeder and dealer in them in America. His fine stallion Blazer won all before him, as did also his splendid mare Daffodil. In weight these winners approached 2,000 pounds each, but a figure lower than this would be the average for the breed. Ten stallions and twelve mares appeared in the several age classes, and there was a nice class for two stallions, each shown with three of their get; another interesting class for two mares who appeared with two of their produce, and lastly a collection consisting of two stallions and three mares, all to be four years old or over, this latter filled by Mr. Hopley with a superb lot. The Suffolk Punch is distinctly an old English breed, and while it is said that quite a number of Norman stallions, brought over with or immediately subsequent to the Conqueror, were used in the country lying "just the other side of the chalk cliffs," yet it is difficult to get an Englishman to admit that the Suffolk Punch is descended from anything but the Suffolk Punch. A pretty good reason when you think "it's good enough." It is, however, an indisputable fact that these Suffolk Punches were used generally for agricultural and heavy tournament purposes, and with Norman horses their pictures appear in all the old paintings and prints illustrating the feudal period. The Suffolk blood has worked its way into pretty well all the draft and heavy coach stock in the remote districts, and while judicious selection has bred it out to a great extent, we often hear of the "punchy quarter," the "stocky, punchy sort," etc., etc., in most unlooked-for places. The Suffolk Punch has been well likened to the old-fashioned sort of Saxon man—shortish, thick set, square built, sturdy, with a good many sterling qualities, solid, but lacking somewhat graces and amenities; when moved slow to desist from motion, persevering, of indomitable will, iron resolution and determined obstinacy, not far removed from stubbornness, but honest.



## BELGIANS.

The Belgians came next, but as I was unable to see them in the ring, and only had one opportunity to visit their stables, I cannot speak with any degree of assurance regarding them, much as I should like to do so. I therefore pass to the

## ARABS.

I give a picture of the champion Arab mare Aga, sired by Njerid (National Arabian); first dam Selica by Gadir of the race Saklavi Djedran (Nejid Hedjaz), premier stallion in the stud Abassie of the Viceroy of Egypt, Abbas Padishah. She is a flea-bitten gray, 15  $\frac{1}{4}$  hands high, 10 years old; bred at the Royal Stud at Weil, Wurtemberg; imported to America in 1890 by Mr. Jacob Heyl, of Milwaukee, Wis., the gentleman who exhibited her at the World's Fair. Of all the negatives I obtained at the Exposition, I prize this one the most, only regretting that it is a small "snapshot" on film, instead of a large 8x10 on glass. There is something magnetic about a pure Arab, and whether it is that we love them because of the "flying steed" stories of our youth, or because the animals are really lovable, I can't pretend to say, but certain it is that no matter what kind of horse we examine, there is generally a preference to anything showing "a bit of the Arab," or "a bit o' blood." I don't wonder that the Soudanese, Bedouins and other natives of the deserts of Arabia strut about like feudal lords and look with disdain upon the Christian, for if they own thousands of such beautiful animals as this mare Aga, they are scarcely to be blamed for preferring the contemplation of beauty and intelligence as contained in their horses to figuring out the intellectual status of a European by gazing at him in passing. As the Chinese consider us in regard to our history and religion, so must the Arab classify us as to our knowledge of horse breeding. All our manufacturing in the horse line will never duplicate the Arab's beauty, although of course we have long ago demonstrated that for practical purposes and a variety of them we can give points to the Sheik in making the nag to fit the shafts or to "stay the distance with the weight up." Stonehenge and hundreds of other eminent authorities have never tired of telling us that it is difficult to obtain an unprejudiced opinion regarding the value of this breed in the stud and its claim to public favor as a useful horse, at the present day, outside of its own country. The Rev. F. F. Vidal, Judge of the Arabs at the World's Fair—a gentleman whom I found a perfect encyclopædia on this breed, and a most



interesting conversationalist—I believe touched the proper chord when he said: “It is for use as foundation stock only that we must uphold the Arab, for of course the structure we have built from it and are now using is so infinitely superior to the old Arabian, that the ‘steed’ should never be thought of except for freshening up the blood a little now and then.” I think those were his exact words, or, at any rate, what he did say conveyed this meaning to me. To describe the perfect Arab is generally as successful as trying to paint a flower which the artist may have seen, so far as giving satisfaction to his audience is concerned. I would much rather trust to the photograph than to any language that I could put together, for, as Mr. Heyl truly says, “in the matter of beauty,



ARAB MARE “AGA.”

grace and symmetry the Arab stands unequalled;” it is therefore not for a mere novice to criticise something that has for ages been accepted as perfect. As to prize winning, there was of course no other place but first in her class and the Columbia medal for this grand mare Aga, and I think visitors to the Fair are greatly indebted to Mr. Heyl for placing before them such a magnificent exhibit, and something natural, or I might say a reproduction of foundation stock, to compare with the European “made” article in other classes. Besides this mare, Mr. Heyl showed another aged and a fine two-year-old mare, also a grand young stallion, which made up the Arab exhibit. It was a pity that Mr. Randolph Huntingdon, of Oyster Bay, Long Island, N. Y., did not send on to the Fair his collection of Arabs, as they would have added greatly to the interest of this department, and the contest would have been exciting.



## AMERICO-ARABS.

There were fifteen stallions and mares in this class, one of the mares also appearing with her colt and filly for the medal given for "best mare and produce." It was something of a surprise to see these latter put into the ring by Mr. Dunham, of Wayne, Ill., the renowned French-Coach and Percheron breeder, but they made a very nice show, indeed, and he well deserved the medal which he got. In a cross-bred class such as this, one needs pedigrees when studying type, and as very few if any pedigrees were given in the apology for a catalogue, which was on sale at the Fair, I am unable to go into detail on individuals in this section, except, perhaps, those exhibited by Mr. Heyl, whose catalogue I happened to obtain. His yearling bay colt Hassan took first premium in his class and will serve our purpose to some extent. I would like to have obtained the pedigrees of Mr. Hall's (of Toronto) three-year-old first and second stallions Fez and Aldebaran, as then we could have discussed type in horses nearly mature. Mr. Heyl's Hassan colt is sired by Young Belmont, the get of Belmont 64 and out of Ida Wilkes; Belmont being by Abdallah 15 and Ida Wilkes the get of Favorite Wilkes 3257. The dam of Hassan was Hasfoura, a pure bred Arab mare who took third premium at the Fair, and bay with a little white on near fetlocks, and  $15\frac{1}{4}$  hands high, aged. Mr. Heyl tells us that the produce of Arab mares from trotting stallions show the uniformly high finish of the Arabian combined with the action of the trotting horse, and promise to develop into exceedingly fine-looking gentleman's drivers and roadsters. As I understand it, the produce of such a cross would necessarily be "fine;" that is to say, suitable for quick road work in a light rig. As there is quite a deal of blood in the trotter already, and certainly more speed than the Arab can supply, I should think that except for beauty of finish and that delightful Arabian aspect, I do not see why a fresh infusion of "blood" should be necessary. However, I suppose that as a matter of fact the most beautiful specimens of the gentleman's roadster are nearly related to Arab blood on one side or the other, and a bit more cannot do any harm, as it certainly cannot detract from their usefulness in light harness. I take it that it is only the speedy driver and roadster that is meant. The cross t'other way about, that is to say the "Arab on top," I believe has been most successfully tried by Mr. Huntingdon, of Long Island, as his magnificent stallion Abdul Hamid, a brilliant chestnut, delightfully marked and most superbly formed, is something worth traveling thousands of



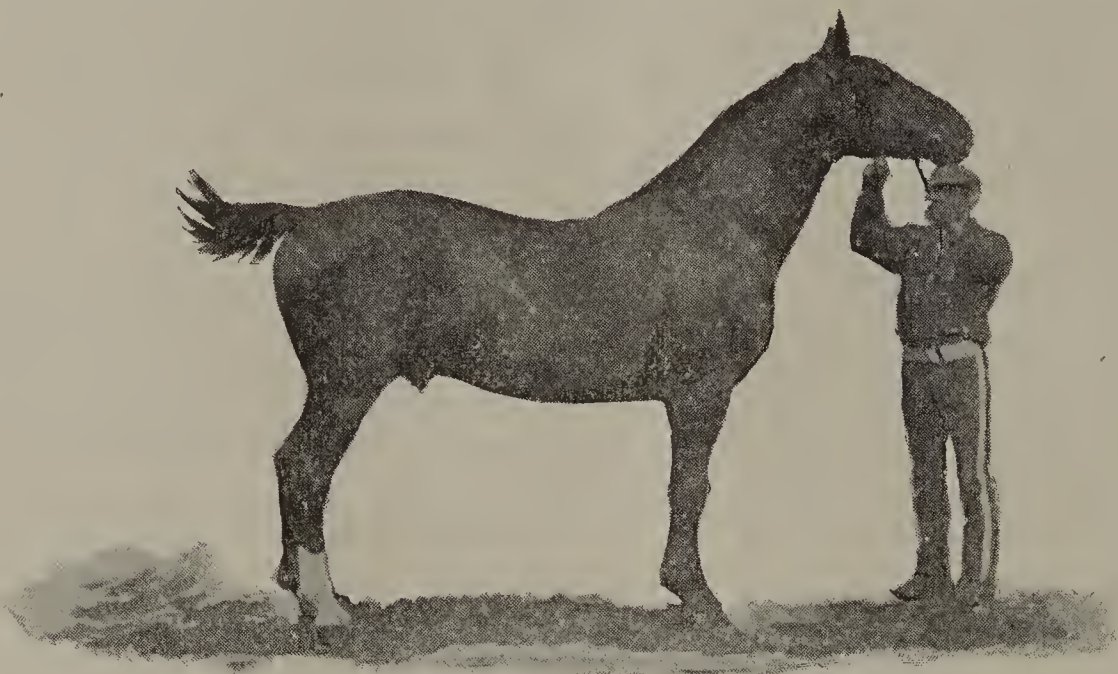
miles to see, and demonstrates the advisability of the cross about as forcibly as anything conceivable. This makes me remark again, the pity of it, that the Oyster Bay Stock Farm did not send any horses to the World's Fair, as especially in this half-bred class for Americo-Arabs would they have been an educator for the visitors. I would not be surprised if this was not also a source of disappointment to the English judge who had expected to be able to get through some critical work in this class and point out the difference between the Americo-Arab and the Anglo-Arab, which latter I believe he himself could have put into the ring had he cared to bring some of his own horses across the Atlantic. In regard to the results of the cross, Mr. Heyl tells us that his object has been to increase the speed qualities of the Arab by its contact with the trotting blood, while retaining the Arabian's high finish. Speed is not to be expected in the first generation, but moderate speed and fine individuality and tractability may be looked for.

#### FRENCH COACHERS.

*Fiat justitia ruat cælum.* Yes, surely, justice must be done the French Coacher, for of a truth no breed at the World's Fair made such a sensation as he did. And he was a surprise too, for I believe I am correct in saying that never before had this breed made his superiority felt so strongly and in such strong competition. Certainly never outside his own country. Responsible for this wonderful condition of things is Mr. M. W. Dunham, the proprietor of Oaklawn Farm, Wayne, Illinois, a breeding establishment which he himself describes as the largest in the world. A pretty tall statement, but I think backed up by solid fact. No less than fifty French Coachers, including foals, represented Oaklawn to prove the ability to put before the public the equal of horses from abroad, and a glance at their extended pedigrees, which abound in details of speed records and historical notes of progenitors, proves beyond doubt that Mr. Dunham has established the most gigantic enterprise in the horse business on a grand foundation, so far as the excellence of the back blood of his stock is concerned; and a moment's examination of the foals put into the ring demonstrates in the strongest manner possible the ability of the breed to reproduce itself, if I may use the term, indefinitely. Size, style, symmetry, action, endurance, and speed are what is claimed for this beautiful, breedy-looking carriage horse, and as the records show their performance of feats of endurance, speed at long distance, and adherence to type generation after generation, it must be



admitted that the horse is about all that is claimed for it. I take the liberty, however, of adding, when bred pure. Now, as I understand it, "pure French Coach blood" is something which has only in recent years "been added to the collection," as the showman would say. When we can speak of a breed tracing back for a few centuries, then I think we can with reason talk about pure blood. I believe it is generally understood that the French Coacher is a "made" horse, and "made" what it is in recent years. With the light thrown upon it at the Fair, however, we now understand that we must go back to the time of Louis XIV, when, in order to fill the demand for horses of great elegance, a number of Arabs, Barbs and *stallions from other countries* were imported by the order of the King and bred to the finest mares of



FRENCH COACHER "PERFECTION."

the old saddle breeds of the District of Merlerault and Cotentin, three hundred being concentrated at the Royal Haras of Pin. The produce were called demi-sang (half-blood), a name that is to-day used to designate the French coach horse in France to distinguish them from other races of that country. We are told that it is entirely wrong to suppose that a Percheron mare was used as the dam, as the French have always been opposed to using thoroughbreds upon draft mares. On the other hand the names of imported Arabs appear hundreds of times in the pedigrees of the coach horse engrafted on the mares of the old Cotentin or Merlerault stock.

After the Revolution, and when the roads of France became famous, travel by coach increased and the demand sprung up for stout, stylish carriage horses of the trotting stamp, the govern



ment taking the matter up and importing between 1815 and 1833 no less than 1902 stallions, 223 mostly direct from Arabia, best calculated to beget size, endurance, speed and style for carriage work. The French stud book was established in 1833, trotting races were inaugurated, and all trotters under 15 $\frac{1}{4}$  hands high were excluded, the distances were two to three miles on a sod track, the horses carrying in the saddle as much as 120 pounds. The weight for four-year-olds is up to 140 and 170 pounds. They maintain that trotting on sod produces high, round knee action, the only truly beautiful movement for a carriage horse; that a high step shortens the stride, and that speed is, therefore, obtained by a quicker movement, the whole tending to a perfect adjustment of stride with rapidity of step, giving the greatest amount of speed with the least expense of power. By picking stallions of most pleas-



FRENCH COACH FILLY.

ing exterior, that have proved their abilities at speed tests, that are large and without coarseness, success is believed to be assured. Two and one-half miles in 7 minutes 42 seconds was the trotting record in 1842, and the best time for five-year-olds in 1891 was 3 $\frac{3}{4}$  miles in 9 minutes 44 seconds, many hundreds of horses going a mile in 2.50; no less than 101 horses three years old going a mile under 2 minutes 45 seconds, and 62 horses doing a mile in 2 minutes 40 seconds. In 1887 the French government owned 2460 stallions, 1728 of which were coach bred (demi-sang), and they exported 34,518 horses of all breeds in that year. From the government and other sources there was \$1,400,000 given towards the support of their grand trotting races. The Department of Agriculture supervises the Haras or studs, which are in charge of a director-general and inspectors, all of whom are appointed from graduates from the Haras schools. The choicest stallions of dif-



ferent breeds are introduced into different localities and offered for use at nominal fees. These stallions are of three kinds—government stallions, those of private individuals who, after their stallions have passed inspection, are paid by the government from \$60 to \$600 per annum according to breed and excellence, and other inspected stallions considered good enough for public patronage. The official model, as published in France for the breeders' information and guidance, calls for everything that goes to make an absolutely perfect carriage horse, viz.: size, style, substance without coarseness, action, speed, endurance, beautiful conformation, and freedom from all hereditary unsoundness. Weight is not stated, but height must be 16½ hands. Speed test necessary to the production of a typical carriage horse is put at 4,000 meters in 8 minutes. Now all this is extremely pertinent, and it shows pretty pointedly what is going on in France towards the production of excellence in the way of large carriage horses. The representatives of this breed as seen at the World's Fair were, without doubt, splendid types, and the foals, ten or twelve of which were put into the ring alongside a stallion or two and three or four mares, told a story that there was no getting away from. The pictures of the mare and colt which I have furnished to accompany this article will need no remarks from me to assist them. Probably the picture of the stallion Perfection will reproduce in half-tone better, and I hope it is also used. The stallion Indre, a magnificent upstanding chestnut horse, 16 hands high, 7 years old, winner of gold medal at Paris Exposition, 1889, in a class of 60 stallions open to the world, made a tremendous showing at Chicago, giving us an exhibition of carriage action with a force that I have never seen equaled, and propelling himself with a swing of the hind leg that was simply terrific. A pony at full gallop by his side had all he could do to keep the rein easy, and when it is understood that such a horse could get up extremely high speed in a ring 350 feet long and 200 feet wide, it will be admitted that he must have "brought down the house."

*Ex uno disce omnes* may be all wrong, but records and pedigrees of ancestors tell the same story, and all are authenticated by government officials, the details being published annually. Of course these records are under the pedigrees of the first, second and third generation back, many of the third and all, or nearly all, the fourth sires having been English thoroughbreds, some of them Hackney stallions, etc., etc. The fourth dams are spoken of as "mother of two stallions that trotted in," etc., etc., or "were gov-



ernment stallions," etc. The fact must also not be lost sight of that a great many horses in these pedigrees came to be known by French names, whereas if the matter was hunted out some of them would be found to have been imported under English or other dealers' influence. No matter, though, whether it's a "made" horse, or a "pure bred coach horse," it's a grand horse, or, I should say, those I saw at Chicago were grand horses, and if they can sustain their excellence by in-breeding in this country success is assured, but a horse for use in this country must be useful on the mares he meets that are native here, and this is a piece of work which he may or may not be equally successful at. Any country to own such animals as Mr. Dunham put into the ring at the World's Fair is a million dollars the richer by reason of those few individuals, and if they will do all that they appear to be able to do, then untold millions will not count their value. In the matter of prizes, I think I have already said that Oaklawn took the majority, and they made up a silken banner for the parade which held no less than sixty-five first premium and sweepstakes blue ribbons won at the Columbian Exposition in French Coach, Percheron and Arab classes. And now let us get across the channel and talk about the

#### CLEVELAND BAYS.

The picture of Mr. R. P. Stericker's renowned prize-winner Highcliffe, while not doing the horse justice, will serve to show the difference in type of this breed as compared with the French Coach horse, the one denoting substance and power, the other "extreme breediness." The Cleveland is "long and low," powerful in the forehead, has an "upstanding" aspect, is naturally crested, is remarkably straight on top, running in a direct line to root of dock, the posterior quarter being square, long and beautifully curved down to a well muscled gaskin running to a hock "well let down." The black "list" along the spinal column, and that striking bay color of the body, with points black, are always present in the Cleveland to stamp him as with a sign of his race. 16 hands  $1\frac{1}{2}$  inch is the height of Highcliffe, and his weight is 1,480 pounds, at 7 years old. As a breed, it runs from 16 hands to 16  $2\frac{1}{2}$  inches, and the weight from 1,200 to 1,450. He is another distinctive English breed, indigenous to one section—this time that district of Yorkshire called the Vale of Cleveland, or Pickering, as the Sterickers, an old Yorkshire horse breeding family, would call it. This Vale has from time immemorial been famous for its carriage horses, hunters, troop horses and hackneys



of the highest grade; and it still preserves its character, although the character of the horses themselves has changed somewhat, the use of the thoroughbred having left horses on the hunter type and showy, stylish carriage type rather than the distinct types as enumerated above. The Cleveland Bay, when found pure and tracing into straight Cleveland back blood, is sound, hardy, active and powerful, with great endurance both for draught and for weight, any distance, at a certain speed, under the saddle. The largest and heaviest type have always been favorite coach horses, and the more springy and lightly built were the hunters of days gone by, when the heavy weight farmer and heavier weight hunting squire were not satisfied without six solid hours in the saddle over the roughest ground, ploughed and otherwise, after a fox who, not being compelled to go the pace of to-day, was less skittish about



CLEVELAND BAY "HIGHCLIFFE."

creeping in the open, and did not seek earth until he was completely worn out. The Cleveland has long had the reputation of being the most prepotent coach horse in the world, stamping its own color and form on its progeny with absolute certainty, and its get out of mares of other breeds of about its own stature have always found a market as coach stock. In the matter of speed they have been known to trot a mile in three minutes carrying 196 pounds, and eighteen miles inside of one hour with 250 pounds up, but these are exceptional cases, as is the record of 700 pounds being carried sixty miles in twenty-four hours, four times a week. The most interesting story is that of the Yorkshire merchant who left London on Monday morning, arrived in York, 200 miles distant, on Wednesday afternoon, the same evening went on to Yarm, his home, 40 miles further, which he reached at one



in the morning, was called at six A. M., and rode his same old Cleveland mare another nine miles to Darlington, where, when put in the stable, she "ate like a hawk." There were at least fifty of these Cleveland bays exhibited at the World's Fair, and a magnificent appearance they made, eight stallions and three mares being shown by Stericker Bros., of Springfield, Ill.; a dozen by Mr. G. E. Brown, of Aurora, Ill.; the remainder distributed between the Cleveland Bay Horse Company, of Paw Paw, Michigan, Warren & Son, Wis., and others. Mr. Stericker's Highcliffe took first, and Mr. Brown's Eclat ran him very close, the latter having lots of quality, especially in the forehead, the former boasting of best top line, but in the flesh leaning to the heavy side. In the four-year-old class these two exhibitors competed again in the first three horses, Mr. Brown taking first and third, and Mr. Stericker getting in between. Stericker's Dewdrop mare took the cup and sweepstakes, and as she appeared with a suckling colt, she demonstrated forcibly the kind of breeding machine these Cleverlands make. As a contrast or foil for the last two breeds described, we will now consider the horses from the land of the Kaiser

#### GERMAN COACHERS

We ignorant globe-trotters, who have always spoken of the German Coacher as a German Coacher, discovered to our surprise at the Columbian Exposition that he may be either Prussian Trahkenen, Hanoverian, Oldenburg or Holstein, and anything from a medium weight saddle horse to a coach horse or van horse of a decidedly heavy type, in some instances approaching the agricultural horse, though by the pictures presented in the stud catalogues or oil paintings exhibited in the stables of all these breeds, one would imagine that they are all on the order of the French Coacher or the Cleveland Bay. As to the Trahkenen of Prussia, we learn that "it has been bred homogeneous since 1787, combining the best strains of Oriental and English thoroughbred blood grafted upon a select strain of native horses suitable for the purpose, the result after careful selection and judicious breeding being a fixed type of acknowledged excellence, which reproduces itself with great uniformity." Virgil, a grand looking black horse, 16 hands high, six years old, and bred in Walterkehmen, Prussia, belonging to Mr. Jacob Heyl, shows distinctive character and quality; but he, in three removes on top, is into the family of Revolution, Lady Lowther and Filho da Puta, while on his dam's side the English thoroughbred is remarkably prevalent. The in-



formation I was able to gain about the character of the "selected mares native to Prussia" amounted to so little that I don't remember whether or not I got any details about them, and there was such a dearth of information respecting the character of horses actually named in the pedigrees, and respecting the nomenclature, and still less about performances of sires, grandsires and great-grandsires, when not English race horses, that we have absolutely no peg handy on which to hang up our enthusiasm. Besides all this, there was a lamentable absence of young stock, either full-blooded or half-bred, as an indication of what these horses can get. With regard to Hanoverians, we are informed that for centuries the Prussian Province of Hanover has been renowned for its horses for riding and driving, and that Italy and France draw large supplies from it, and that the boulevards of Paris bristle with horses of Hanoverian origin. It is further claimed that the Hanoverian horse has a noble and regular proportion, high, well set neck, well developed muscles, is strongly built, and has a long step besides being very docile in harness, easy to guide in the saddle and good-natured in the stall.

Now I should say for a "family horse" this description about fills the bill, provided, of course, that the depot is next door; but, I am pleased to be able to say, that this description does not by any means describe the best specimens of the German Coacher seen at the World's Fair. It certainly would not begin to cover Mr. Holbert's Moltke, Amandus, Kaiser Frederic, the mares Lillie and Dora and the Oldenburg Society's champion mare Heldin. It would be interesting to study the different types presented in all these German breeds, as the government of the several Provinces named have supervised the breeding of horses, have been distributing inspected stallions among breeding stations, and the German army—a tremendous customer; I suppose the great market for these horses—has for years been drawing its supply from these breeding establishments, as above, if we are to believe all we are told by the exhibitors of the German Coachers at Chicago. The two German judges, Rittershafts Director Von Oettingen, of Beberbeck, and Landstallmeister von Soldern, of Plattenburg, went through their work in the ring in a rather peculiar manner, and gave decisions which decidedly did not appear to be popular nor to meet the views regarding conformation which English-speaking horsemen have invariably been guided by. The men in charge of the horses were rather heavy and heavily burdened in the boots and livery which they wore, and in running their horses on the



line seemed to have a predisposition to get under the front feet of their horses and run under their noses, watching their own steps rather than those of the horses, and filling up the time with shouting something which caused the animals to go out of their stride more often than make them improve their speed or style. "Poorly shown" (*Anglice*) expresses it I think, and if these horses are to gain prominence in the American market, swifter runners must be engaged, long lines must be used, and horses must be got into a spirited condition, especially for the show ring, if they are to exhibit what is probably in them. As a good honest pair in a heavy carriage or T cart a couple gave us a show about the grounds, but this pair would not have made much of a surprise in a four-in-hand, either in the wheel or the lead, certainly not the latter. I did not see any of them under saddle. As an array of horses, or a group, they, in consequence of the large number shown, got the attention of the audience, but like the ordinary, common-place actor, when the leading tragedian has left the stage, the parade did not seem to hold the crowd enthralled by any means, and the opinion which I heard on all sides gave me the impression that, taken altogether, the German Coacher was "an honest sort of horse that would find a constant market at a reasonable figure for city general purposes, as distinguished from the quick demand for the other breeds of carriage horses already described."

And now, after taking up so much of your valuable space on foreigners, I will take a dip into my own element, although I shall scarcely go overhead into it, as I am afraid I am tiring you. The spring we now take will deposit us into the

#### HACKNEYS.

There were thirty-two in this section, and there should have been five hundred and thirty-two, after all the public enthusiasm which the importation of these horses has caused during the last three years, and the vast sums of money which have been laid out to place on this continent the leading representatives of the breed. This large outlay of capital, though, represents for the most part Eastern buyers, and at this Fair there were no horses from the East or from England exhibited in the Hackney classes, a few Canadian gentlemen, like the owner of the champions, Mr. Robert Beith, of Ontario; Mr. Crossley and Mr. Hastings, of same Province; and Western breeders and dealers like Mr. R. P. Stericker, of Springfield, Ill.; Messrs. Thomson & Bland, of Crawfordsville,



Ind.; Burgess Bros., Wenona, Ill.; A. L. Sullivan, Nebraska, and three or four others, comprising the list. As at all previous shows, the horses in this section were of several types and standards, and as the arrangement of the catalogue precluded any attempt to classify animals of a certain height together, but, on the other hand, required exhibitors to show horses of a certain age together without reference to height, there was promised a little difficulty from the start, and, indeed, this objection had been raised in other classes with just as much good reason. The "real old-fashioned type," or at any rate the closest approach to it, was put into the ring by the Canadians, and while their aged stallion, who won in that class, was hardly of this pattern, yet they showed graceful action and a sire in their six-year-old Jubilee Chief; a particularly sweet and fetching winner in the three-year-old chestnut colt Ottawa, son of Lord Derwent (1034); took third prize with a well-topped two-year-old colt, Star of Mepal II; won championship with the aged stallion already mentioned; got second prize in the aged mare class with Lady Coking, probably the best "real old-fashioned one at the Fair"; picked up first prize with their four-year-old mare Lady Bird; gathered in first and second with their three-year-old mares Winnifred by Wildfire (Bonfire's sire) and Lady Aberdeen by Lord Derwent, and therefore half sister to the colt Ottawa, mentioned above, and to conclude, carried off the mare championship with the leading three-year-old Winnifred. Mr. Robert Beith and Mr. Crossley deserved all these prizes without a shadow of doubt, as they had a superabundance of all the good points in their individuals as compared with the points shown by competitors in their classes; but how much more interesting and exciting would it have been had the host of horses of similar excellence which the East can show been paraded in the Columbian arena. It was noticed that typical representatives did not always exhibit the most quality or the most action, they evidently lacking the latter on account of poor handling or training. Action was often the only thing to depend upon, with quality and manners to help out. It was also noticed that while some of the Western gentlemen had evidently dealt with horses of extremely useful make up as offerings to farmers and others interested in the development of the larger harness horse, it was quite apparent that a few of the exhibitors had been influenced in their purchases in Hackney districts of England by the saleable qualities of their horses in the public market, rather than by their adherence to high-class type, such as is depended upon in England to reproduce



true-shaped representatives of the old-fashioned Hackney breed. The exhibitors, however, showed rare pluck when they brought their horses so many hundreds of miles to the Fair, fully expecting to meet and be beaten by the Eastern high-priced animals that are descended from prize-winning ancestry, and which have been kept in constant show condition without regard to expense. That these latter did not appear is to be regretted of course, from a public point of view, but it should be understood that the great social event which takes place in November at Madison Square Garden, New York, is a Hackney Waterloo not to be played with, and when it is further understood that horses in course of preparation for this great event have also to be shown at such fairs as White Plains, Danbury, Rochester, Boston, Philadelphia, and other places in the Eastern States, some allowance should be made for the failure of their owners to appear in competition at Chicago, which, although the centre of observation for the whole world just now, is far removed from the Eastern base of stud operations, etc., and quite an expensive point to reach, as well as a place where horses with contracts to fill would be compelled to stay for not less than three weeks at a time, when three weeks is something too valuable to lose for the sake of publicity or the small prize money offered by the World's Fair.

In this connection, speaking of prize-money, I think it was rather an invidious distinction to rank the Hackneys, Suffolk Punches, Belgians, Morgans, Kentucky and Missouri Saddle Horses, Jacks and Jennets at \$110 for highest class prize against \$150 for other breeds. It was also very unjust to put the Shetland Ponies and Mules at \$100. A World's Fair should not discriminate among breeds. The Mule is just as much the result of careful breeding and judicious mating of animals as the grade Clyde and Shire, and the Shetland Pony is just as much a necessity, if only for children's use, as the French Coach or Cleveland Bay. The Jack has certainly proved a godsend to the railway contractor and agriculturist of this country by reason of the Mules he has begotten, fit for a use under circumstances where the horse would be absolutely of no value. But to come back to the Hackneys of Yorkshire, the Midland Counties and Norfolk, as shown by representatives of families indigenous to these sections of England, which were put into the Columbian ring, we have added little to our store of information on type, and are only more firmly fixed in our opinion as to the manner in which this country has been supplied with indifferent specimens, many of them not calculated to



reproduce any particular type, or even transmit any particular points of excellence to whatever progeny they may get out of native mares. It is this departure from fine individuality typical of a race on the part of importers, whose only object is to sell a horse or two at a small profit, having purchased it originally at a low price, that floods a country with "ordinary" horses, who having no character of their own are unable to transmit any, and soon become swallowed up in the mass of stuff of their own stamp that they meet in a place like the United States. If European countries, who have always had more or less good foundation stock of one kind or another to breed to, have considered it necessary to place the matter of horse-breeding under the supervision of trained experts, and have found it advantageous to set aside annually large sums of money for the encouragement of speed competitions, and to pay private parties for the use of their stock horses, does it not appear that similar arrangements for the improvement of horse-breeding as a national enterprise, and for the supervision of importations, could be adopted in this country without fear of injury to the industry as carried on by individuals or stock companies?

Breeding societies and the publishing of authenticated stud books are doing much to this end, but their work is only proceeding gradually, and is by no means able at the present time to cope with the difficulties that threaten to overwhelm the little good that the societies are able to accomplish. Before closing I suppose I am expected to describe the several types of Hackney as exhibited in the ring, how they differed from each other and in what manner they approached or departed from the "old-fashioned original type." To do this to my own satisfaction would take up more space than I could expect you to reserve for my exclusive use, and in order to demonstrate plainly what I meant it would, I think, be necessary to publish diagrams, or in fact photographs of living horses well known in the show ring, bred on different lines. I therefore will not bore you with any further remarks anent the Hackney, at least not at this writing, except in so far as to state that in height the true pattern ranges from 14 hands or 14.2 to 15.2, is able to move the scale at 850 to 1,200 pounds, in a few instances 1,300, has an outlook almost as "breedy" as the picture of the French coach, but nearer that of the Cleveland Bay portrait which I give; is wide chested and strong in the shoulder without coarseness; has shoulder set sloping—a point of beauty much dwelt on; good girth for his size; wither clean and rather high,



and at the bottom of a beautifully curved line which forms the crest running up to the poll; a small ear, alert and well pointed; forehead broad and running down to not exactly a bony, but, nevertheless a clean face, which has in all the best specimens a peculiar but pleasant "nag-like" formation, which must be seen in life and cannot be described; the back short, wide and straight, denoting strength to bear weight and as a point of beauty; a wide loin that will bear pressure, and is double, showing to some extent the gutter between muscles; the croup well united to the loin, well muscled, and running almost, but not quite straight back to the dock, which latter should be strongly set in and high, leaving the proper curved line around the buttock and down to gaskin to constitute the beauty of the "real nag quarter." All legs should be short, sturdy, well muscled, tendons well separated, bone big and flat, knees wide in front, hocks clean and strong, pasterns rather short, strong and slightly oblique; feet round and perfect in every particular, it being most important in the legs of a Hackney that the arms are inclined to length, but below the knee and hock short bone, and the hocks very close to the ground. Action should be high, arm to be lifted with a snap, sending out the knee and then the foot with brilliancy and finishing the stride some distance ahead by lightly touching the ground, all this taking place in true time, while the hind legs have been sent well under the body with a high flexion of the hocks so as to uphold the weight or balance the whole fantastically to some extent, and insure perfect rhythm, or, as we say, the 1, 2, 3, 4 step that is so delightful to drive in a two-wheeled perfectly balanced vehicle on a well kept road, the "nag" arching his neck naturally, so as not to pull on the bit, which latter should be adjusted in such a manner as to permit of one hand doing all the work by a light touch of the finger, and a word or a chirrup, or a fairy stroke of the whip on the flank or loins keeping the horse keyed up the entire duration of the drive. This to the lover of a prize-winning and really useful Hackney is heavenly, and this is what all the demonstrations on the tan bark are meant to convey to the uninitiated.

#### MORGANS.

Had there been no other attraction but Morgan horses billed for the World's Fair, I would have attended the show with just as much eagerness as I did, for I had promised myself a rare treat in examining at close range representatives of the world-renowned Vermont Morgan breed. I expected to see hundreds of represent-



atives of the much lauded type put into the ring, and I was fully prepared to see mares that would have nicked well with the Hackney to produce a perfect driving cob of sweet combination and as hard as nails. I was disappointed. Of the old type, as I had been led to understand it, I saw some 13.2 to 14 hand ponies, delightfully formed, with the sweetest of heads and necks, the most beautifully turned bodies, and with flowing manes and tails—one or two had wavy tails, I noticed, and hard, but not the best formed legs. They were ponies though, and ponies are not my specialty. The mare who took the championship and first prize in her class, Mr. Battell's Jessie, was particularly rich in quality, and for this, if for no other reason, she well deserved a prize. As old-fashioned type (that which has been pointed out to me for three or four years, and which I have persistently looked for) was not recognized in placing the champions at the World's Fair, but rather what seemed to me to be speedy conformation combined with slightly more size than the old sort showed, I conclude that it was the horses best calculated to trot quickly or to beget trotters that would sell well, which were deemed the best representatives of the Morgan breed.

Then I suppose we must in future accept the Morgan type as merely a "speed type." If so, then Morgans are trotters and should be relegated to the trotting class, in which no particular type is looked for or bred for. Are we to say "Good-bye Morgan"? It is, then, to be business versus sentiment hereafter, and simply breeding useful and saleable horses, without adherence to any particular type, notwithstanding that the lesson which the world acknowledges it has learned is that without type horse-breeding nations have never yet been able to retain uniformity or prepotency that is to be depended upon to reproduce characteristics most highly esteemed in individuals—except, of course, that one point, which may or may not have been satisfactorily settled, viz., speed at the trot. Is it because the old Morgan has degenerated, or has dwindled down to pony form and is in consequence no longer profitable, that this new ground has been struck? Or do the signs of the times read "Speed and size"? Or has the Morgan always been a pony which the old people were content with, but which the new regime (educated as it is by the influx of size and style as instanced in the French Coach, Cleveland and Hackney, which are catching the market rapidly) consider only useful in out-of-the-way country places such as Justin Morgan might have held school at? Shade of Linsley! I wonder who



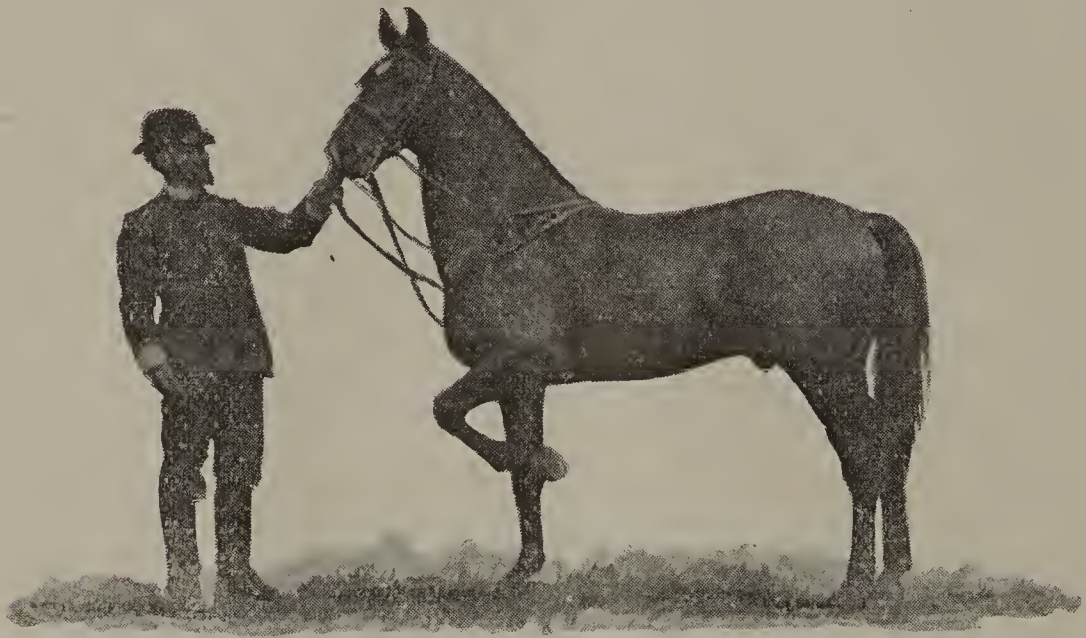
will keep his resting place green now. And yet he only had a 14 hand horse that weighed about 950 pounds to build his Morgan structure on. Then again, the bright chestnut son of this Justin, which was known as Sherman, was only 13¾ hands high, weighing 925 pounds. Granted that Sherman's son Black Hawk went up to nearly 15 hands and weighed about 1,000, but Mr. Linsley told us that Black Hawk's dam was described as a black mare, half-blood English, a very fine animal and fast trotter. Black Hawk's son Ethan Allen, out of a medium sized mare of Messenger blood, was 15 hands and weighed just 1,000 pounds, and his pictures show him to have been a beauty. The English, or some blood very like it, therefore, had got in some work by this time through the dams, and as this later infusion gave size, beauty and speed, it has always been an enigma to me why the small originals on the sire's side are so religiously referred to. And it will be more curious hereafter, if the World's Fair type is to be held up as the proper thing, because on the banner of the new crusade the watchword is "Speed and size," and underneath "Old type Morgan" crossed out. This was the identical banner which seems to have been carried by Col. Jaques of Ten Hills Farm, Charlestown, Mass., who owned or used Sherman in 1831, and who evidently also owned him in 1832 when the horse stood at Dover and Durham, N. H., where he must have served the mare who afterwards dropped Black Hawk. Now Black Hawk had size and style, which was what the Colonel was after. I never like to insinuate, but is it not strange that this same Col. Jaques, of Charlestown, Mass., a gentleman known as a great breeder of horses and other animals, also owned the English Hackney stallion Bellfounder, who came to Boston in 1822 and stood him in and around that city and later in New York State, getting beautiful horses of some size, finish and style out of "half-bred English mares" and others. Bellfounder was a fifteen-hand horse of undoubted Hackney pedigree, and came of trotting lineage way back to a point in the history of Norfolk, England, beyond which it is unnecessary to go. Well, no matter whether the original Morgan type was good, bad or indifferent, and whether or not it was improved by contact with English blood, first principles now seem to obtain, and we must admit that the winners, when not discussed in regard to type, are beautiful horses, very sweet, breedy, and probably able to show a rare turn of speed.

#### KENTUCKY AND MISSOURI SADDLE HORSES.

Truly a magnificent exhibit and one that proved conclusively



that saddle horses with the several peculiar gaits, such as the running walk, fox trot, rack, etc., in addition to the walk, trot and canter of what is known in the East as the perfect park hack, is a delightful horse under the saddle, and able to save himself by the extra gaits without allowing them to interfere in the least with the regulation park hack motion. General Castleman, of Louisville, Ky., a gentleman of most pleasing finish and address, showed his superb mare Emily in a wonderfully scientific manner, getting out of her all the gaits mentioned, as well as many of the movements of high-school, which latter, however, are not deemed essential or necessary by the General in a good saddle horse. While this mare Emily was a wonder, there were several horses approaching her standard, ridden and dexterously shown by the General's sons, and after winning several first prizes in large classes, the National



“MONTE CRISTO, JR.”—KENTUCKY SADDLE HORSE.

Saddle Horse Breeders' Association presented to the General their first silver cup as a memento of his success at the World's Fair. The picture which I send you for this department is that of Monte Cristo, Jr., a magnificent specimen of the Kentucky saddle horse, and as stately a bit of horseflesh as ever entered a ring. Mr. Crenshaw, of Louisville, Ky., was the owner of this splendid animal, and showed him in all the paces exactly and with almost the same degree of cleverness as General Castleman had used. The means adopted by these riders in manœuvering their horses were not discernible, as all was effected by a slight pressure of the knees or thighs, and an imperceptible pressure of the fingers on the reins. The horses were bitted with curb and snaffle, English style, and the dress of the rider consisted of felt hat, sack coat, and either the trousers with side stripe, as for the park, or breeches



and jack boots. There was none of that pulling of manes and ears and signing with the hands waving in the air, as was sometimes resorted to by riders from Missouri. These latter, though, put a most magnificent array of horseflesh into the ring, showing finished style, all the gaits, great speed, tractability and thorough proficiency as saddle horses.

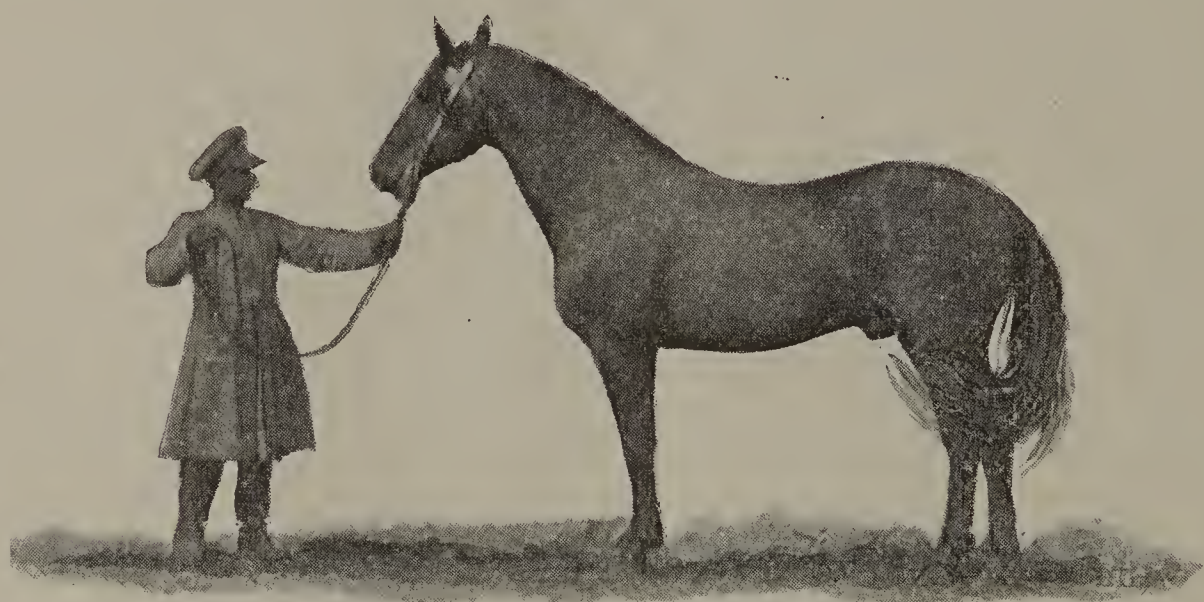
One of the most attractive features of the show was the competition among these saddle-horse exhibitors for the championship for aged stallions. After a most exciting contest, in which speed, endurance, manners and ability at all the gaits on the part of the horse, and dexterity and cleverness on the part of the rider, were severely tried, Mr. J. Bridgeford, a gentleman who must have been about seventy years of age, was declared the winner, and as the result was declared, the house rose and saluted the veteran rider with loud and continued applause. The class calling for best collection of one stallion, one mare and one gelding, brought five sets into the ring, and the cup presented ultimately became the property of General Castleman. Another cup, offered by Mr. Buchanan, Chief of Department of Live Stock, for the best stallion, mare or gelding, was won by Mr. Crenshaw's handsome dark bay Monte Cristo, Jr., and to finish up a riding contest was won, after a most brilliant exhibition of horsemanship, by Mr. Bridgeford, the old gentleman already spoken of. Never were saddle horses shown better nor to better effect, the ring being admirably adapted to such exhibitions, and the galleries crowded with not less than ten thousand people every time the horses appeared. The owners of these horses claim to have bred in them for several generations all the gaits which they show, and declare that they are all more or less present in the young foal, needing only direction and dexterous handling of the youngsters to be developed up to the correct pitch for a gentleman's service. The horses are all beautiful, breedy-looking animals, some rather long, but the majority not so, and on the other hand, as a whole, exceedingly well turned, although not more than half of them approaching the conformation of Monte Cristo, Jr.

#### RUSSIAN ORLOFFS.

If not the most attractive feature of the whole horse exhibit, at least these were very near it, and as far as their showing in their stalls certainly a long way ahead of anything else on the grounds. Their stable was a parlor rather than a barn. There were eighteen of the Russian horses, light, heavy and draught, in one stall 150



feet long by about 45 feet wide. Every horse stood in a box 10x12 feet, side on to the visitors. The entire front of each box was removed, and the back and sides of the box lined in red bunting (for a white horse) and in blue bunting (for a black horse), which had a tendency to make each animal show off better. Half way across the box a bar covered in red bunting was stretched, the horse behind it standing on clean deep straw, the visitor, if he wished, standing on a mat on the front half of the box floor. Everything was carried out as if on dress parade, the grooms all in Cossack soldier's uniform. Over the head of each stall was a richly illustrated badge setting forth the owner and name, etc., of the horse. Every evening about five o'clock these Russian horses were taken from their stalls, paraded through the grounds and marched off to their sleeping barns at some distance outside the



ORLOFF TROTTER "OURIADNIK."

grounds. Every morning they were all paraded back into the show stalls. All this I should say ought to be useful to those interested in showing off stock at horse shows to the best advantage. These Russian horses were, generally speaking, of four kinds: Light and Heavy Orloff Trotters; Orloff Saddle Horse; Russian-Arab and Orloff-Arab; and Light Russian Draft. The Heavy Orloff Trotter, while being speedy and full of endurance, was not over fine, in fact rather coarse; but standing or in action they show up grandly, the stallion Ouriadnik, whose picture I have given, being fully 16.2 hands, but I should say nearing his 15th year. In action he has a very springy gait, and can go very fast, taking a very long stride without the extraordinary swing of the American trotter behind, but with a rounding action in front that would lose him a race here below the 30 mark, I think. He is a



very handsome horse, however, and I should suppose one of the leading representatives of the Orloff trotting family. He is a black horse with gray hairs. This horse was sent to Senator Stanford, of California, by the Russian Government. For a really speedy one Count Dimitry's dapple-gray Tchistiak, five years old and nearly 15 hands, I think was best, but he was nothing very attractive in point of finish or quality. An old white horse called Oussan, approaching 17 hands high, was superbly formed, with clean head, neck well formed, aspect good throughout, straight on top, not too long where most of the Russian horses are, although over the quarter he was long enough, which was saved by the position of his dock. The Saddle Horse Priyatel, black, nearly 17 hands high, and about five years old, was a wonderfully made one and as beautiful as anything at the show in my humble opinion. He was a good walker and at the trot went clear and straight. I ought to have given you a picture of this horse, as I believe I took one when I got Ouriadnik's portrait.

Several of these Russian Orloff horses, most of them, by the way, stallions I believe, have been sold by Captain Ismailoff, who conducted the Russian Orloff exhibit at the World's Fair. Mr. John A. Logan, Jr., I understand, has purchased the Saddle horse, the draft stallions, and a chestnut called Beckboolat; while Mr. E. D. Stokes, of the Hoffman House, has taken four of the trotters including Tchistiak. I believe it was the original intention of Captain Ismailoff to travel the Russian exhibit on tour through the country, but as these sales will deplete his stock, I suppose he will simply exhibit what he has left at the New York show before he takes them back to Russia.

With the exception of the Shetland Ponies and the Jacks and Jennets and the Mules, I believe I have now spoken on every breed exhibited, and with your permission I will leave these until some future time, as the Shetlands require mention in detail in order to do justice to the large number of exhibits made by Mr. Hawley, of Pittsford, N. Y.; Mr. Hoag, of Maquoeketa, Iowa; Mr. Watkins, of Detroit, Mich.; and Messrs. Robert and James Lilburn, of Emerald Grove, Wis., the last of whom had the smallest pony—I was going to say in the world—called Toy, 27 inches high, 3 years old, and weighing just 100 pounds.

Before closing, allow me to add my tribute to the many which must have already appeared in the press respecting the kindness and courtesy extended to every exhibitor and others interested in the Live Stock exhibit, by Mr. Buchanan, the Chief of Depart-



ment, and his secretary, Mr. Mills, both of whom were indefatigable in their efforts to arrange for the personal comfort of all who had in any way business connected with the exhibits, and who would have found great difficulty in obtaining proper and reliable information and permission to enter the arena, etc.; had not these officials gone out of their way to assist them.

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## EXTIRPATION OF A TUBO-OVARIAN CYST.

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BY DR. R. A. ARCHIBALD.\*

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A short time ago, at his hospital on Broadway, Dr. Pierce, of Oakland, California, performed the above operation with success. The doctor was ably assisted by Dr. H. A. Spencer, and Dr. Rowland Lord, both of San Jose.

The subject was a six-year-old thoroughbred mare called Lady Emily, sired by Three Cheers, dam Queen Emma by Woodburn, bred by John Arnet, of Pleasanton, Cal., and at present owned by J. B. Chase, of San Francisco, and handled by the well known trainer, Thos. G. Jones.

The mare, since she was three years old, has been bred to several first class horses, such as Imp. Cheviot, Imp. Friar Tuck, etc., but without success. Last June Mr. Jones, seeing that she was rapidly losing her health, and in fact she commenced declining so fast that it became absolutely necessary to have some medical or surgical attention for her, had her examined by several reputable veterinarians, who diagnosed her case as prolapsus uteri, and she was considered by them as incurable. The mare kept getting worse, until Mr. Jones decided to take her to Oakland, and have her examined by Dr. Pierce, who (as will be shown later) correctly diagnosed her trouble as being due to a disease of the right ovary, and decided that it would be necessary to extirpate the diseased organ before it would be possible for the mare to regain her normal condition.

He found that there was a continual discharge of a reddish-brown fluid mixed with mucus from the genital organs, and the uterus and vagina were in a highly catarrhal condition. The right

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\*Read before the California State Veterinary Medical Association.



fallopian tube was also found to be enlarged and indurated to the touch.

Having gained permission from the owner to operate on the mare, he invited Drs. Spencer and Lord to assist him.

He then proceeded to prepare the animal as follows: a few days prior to the operation laxatives were administered until the fluid, slightly fæculent evacuations, showed that the intestinal canal had been emptied. The uterus and vagina were washed out twice daily with a weak solution of phynele. The animal was pronounced ready for the operation on July 31st, when the visiting surgeons, on Dr. Pierce's invitation, made a thorough examination, agreeing with Dr. Pierce in that the removal of the right ovary was necessary to save the animal's life. Owing however to the inflammatory and catarrhal condition of the vagina, it was decided not to operate in the usual manner through the vagina, but through the flank. Two hours before the operation the rectum was emptied by an enema. Only a small number of instruments were selected and placed in readiness in an antiseptic solution of phynele, such as bistouries, artery forceps, scissors, suture material, a couple of sponges, a pacqalin cautery for cauterizing the bleeding surfaces.

The subject was placed on the operating table and put under the influence of chloroform. The abdominal wall was well washed with soap and water and an antiseptic solution. The hairs and upper layers of the epidermis were removed with the razor off a place midway between the last rib, the transverse processes of the lumbar vertebræ and the anterior iliac spine. A spray was suspended over the field of operation, the spray being filled with a solution of lysol, the parts operated on were by this method kept continually saturated. An incision was then made through the skin and *panniculus carnosus*; the fibers of the abdominal muscles were separated by the finger until an opening was made large enough to admit the hand of the operator; the hand was then inserted through the peritoneum into the abdominal cavity; the ovary was grasped and brought to the opening where, with the scalpel, the peritoneum was severed and the ovary, with a portion of the fallopian tube, was removed with the ecraseur. Peritoneal toilette was dispensed with, as very little blood had escaped into the abdominal cavity. The peritoneum was then sutured with carbolized catgut, the ends of the sutures being left long enough to act as a drainage tube; the muscles and skin were sutured with silk. A dressing, composed of Hyd. Chl. Mite two drachms and



Acid Boricum one ounce, was dusted on the wound; three yards of antiseptic gauze (mussed up) was put over this, and over this was placed about a quarter of a pound of absorbent cotton, and over all a strong muslin roller, wound round the abdomen and secured so it was impossible for it to slip forward or backward. The after treatment consisted of two-drachm doses of Ex. Arnicæ Fl. every hour for the first twenty-four hours, and three times daily afterwards. A tepid solution of sodium chloride and zinci chloridum was injected into the uterus twice daily.

Two hours after the operation it was found necessary to administer two grains Morphine Sulph. hypodermically, in order to quiet the animal, as she was very nervous.

The dressing was removed at the end of two weeks, when it was found that the wound had nearly healed, and there was no trace of pus having formed under the dressing. A fresh dressing similar to the first was applied and left there until the wound had perfectly healed.

On the morning after the operation her temperature was 102°, pulse 48, and from that time on the pulse and temperature gradually decreased until they reached their normal condition.

The mare at the present time is healthier and more thrifty than she has been for four years, and it is thought by the attending veterinarians that she may become pregnant next year.

Upon examining the extirpated tumor, it was found to be what is commonly called a "Tubo-Ovarian Cyst." The outer surface of the ovary was perfectly smooth. The cyst was as large as two fists and contained a considerable quantity of thick brownish red fluid. The inner surface presented warty excrescences in places. The fimbriated portion of the tube took part in the formation of the cyst, so the index finger could be passed from the cyst into the tube.

As was mentioned before, the extirpated tumor (which looked somewhat like an ordinary cystoma) also contained a portion of the fallopian tube, which was dilated and thickened. The medium portion of the fallopian tube presented a broad mesosalpinx, while the lateral portion ran into the wall of the tumor. On being opened the tube discharged a thick brownish red fluid, and could be followed laterally into the cyst. When seen from the cyst, the opening of the tube was markedly convoluted, and the fimbria passed over upon the inner surface of the cyst, as prolongations of the longitudinal folds. It would be well to say here, that the entire tumor was covered with peritoneum, and but a comparatively



small portion was situated in the broad ligament. In regard to the adhesion of the tube to the ovary (since it is not a part of physiological ovulation), it must have preceded the rupture of the cyst, and the formation of tubo-ovarian cysts is due to the assumption of a catarrh of the tube and follicle.

The tubal catarrh causes circumscribed peritonitis and adhesion of the tube. The catarrh of a follicle causes its dilatation, and its rupture into the tube produces the tubo-ovarian cyst. The first stage in the process is adhesion of the fimbriæ, which can occur only on the peritoneal surface. The fimbriæ and their terminations are therefore directed inwards. This results in dilatation and dropsy of the tube. If a follicle now matures or forms a serous cyst and ruptures into the tube, the tubo-ovarian cyst is formed. Further secretion of the tube will enlarge the ovarian part of the cyst. This explains the fact that the ends of the fimbriæ are found upon the inner surface of the cyst. The reason that this cyst did not increase in size is due to the fact that the tube was always pervious in the direction toward the uterus, and increased pressure within the cyst occasionally gave rise to a discharge of fluid into the uterus. Thanking you for your kind attention, and renewing the hope that in the near future the fruits derived from the discussion which I sincerely hope this will provoke, may be beneficial to all of us.

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## SCOURING IN CALVES.\*

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BY JOHN M. PARKER.

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Diarrhœal diseases in calves may be roughly divided into simple dyspeptic diarrhœa and "acute mycotic diarrhœa or diarrhœa of bacterial origin."

The difference between the two is rather one of degree than one of kind. In the former the symptoms are not so severe; it is rarely fatal, and the treatment is practically the same as in the more acute form, which is the form I shall more particularly consider.

Within the last ten years numerous investigators have been at

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\* Read before the Massachusetts Veterinary Association, April, 1893.



work on the aetiology of diarrheal diseases, but so far no very positive conclusions have been reached. It appears to be generally accepted, however, that diarrheal diseases are due to bacteria or their products.

It is now known that bacteria are present in the normal intestine in enormous quantity, and further that different kinds of food favor the growth of different kinds of bacteria. In infants or animals fed on milk diet, for example, there are two kinds of bacteria that are always present; one of these, the "*bacterium lactis aerogenis*," is only present during milk diet; "it has not been found in the meconium, nor after a flesh diet, and it is found principally in the upper portion of the intestinal tract." As pointed out by Escherich, "Its vital activity in the intestine depends on the presence of milk sugar, and its extension there corresponds with that of this substance."

Milk sugar is completely absorbed in the stomach and small intestine, and is not found normally in the large intestine. At the time of milk digestion the "*bacterium lactis aerogenis*" is found in great quantity in the upper part of the small intestine, and in proportion to the absorption of milk sugar it becomes scarce, diminishing in number, in the color, and in the faeces comparatively few individuals of the species are found. (Keating, p. 180.)

Baginsky has demonstrated by experiment that the "*bacterium lactis aerogenis*" has an extremely active development, and when cultures are made along with other pathogenic bacteria in suitable culture media, the "*bacteria lactis aerogenis*" grows so rapidly that it prevents and retards the growth of the other bacteria. These experiments led him to the opinion that the "*bacterium lactis aerogenis*" if placed under favorable conditions may prevent the growth of other pathogenic organisms in the intestine, and that "in the acid fermentation of milk sugar caused by the '*bacterium lactis aerogenis*,' we have a remedy which serves in the infant's organism to protect the intestinal wall from pathogenic bacteria." But when this fermentation exceeds a certain degree, which may happen in abnormal conditions of the intestine, it destroys the "*bacterium lactis aerogenis*," and thus lays the foundation for pathogenic processes of various kinds. (Keating, p. 185.) For example, if from some temporary cause there is increased peristalsis, or an intestinal catarrh, or if from any cause there is an interference with the normal process of digestion, the temporary trouble may be kept up and aggravated by the presence of the micro-organisms which have gained the ascendancy through the destruction of the normal bacterium.



These micro-organisms "may have begun their work outside the body by developing in the milk and so causing abnormal products of decomposition or fermentation, possibly poisonous ptomains." These abnormal products of decomposition or poisonous ptomains affect principally the nervous centres and cause the severe nervous depression and heart failure usually seen in these cases.

Baruch also believes "that the summer diarrhea of infants is chiefly, though not solely, due to the ingestion of micro-organisms which cause, in the gastro-intestinal tract, conditions analogous to those found in wounds, to which septic material has had access." He further argues that unsanitary conditions, poverty, filth, etc., are entitled to be placed only among the predisposing causes. The indigestibility of caseine of cow's milk by artificially fed children is of no importance, since in winter this is borne without serious consequences. He concludes that the kind of food, if it be reasonably constructed, has little to do with producing diarrheal disease, *provided the access of micro-organisms in its preparation can be prevented.*

Rachford also holds, 1st—That the chief, if not the only direct, cause of "summer complaint" is abnormal intestinal fermentations of food stuffs. These are always caused by bacteria.

2nd—At present we are unable to make an exact ætiological classification of these diseases, but it is probably true that there are quite a number of pathogenic bacteria, each capable of producing definite changes in the food which will cause characteristic symptoms.

3rd—The disease, being of bacterial origin, is necessarily infectious. It is probable that not all the diseases embraced under the general term are equally infectious.

This writer believes that bacteria may cause disease in any one of three ways :

1st—By interfering with the growth and function of bacteria normal to the intestine. In this way bacteria which do not produce poisonous ptomains or irritating products may cause digestive derangements. It is quite likely that this form of disease may act as a predisposing cause to other forms.

2nd—By formation of irritating materials during the fermentation of food stuffs in the intestine, especially in acid fermentation.

3rd—By producing ptomains which act as physiological poisons. (Universal Med. Sciences, vol. i, 1889.)



All investigators seem unanimously to be of the opinion that bacteria either directly or indirectly are *the* cause of this class of disease. There seems to be a tendency, however, to lay too much stress on the bacterial origin of the disease and forget that diet and constitution, and the sanitary and hygienic surroundings, have a great deal to do with its fatal character.

As showing the influence of diet on the prevalence of diarrhœal diseases in children, out of 1,000 cases recorded by Hope, 30 were fed by the breast exclusively; of 602 fatal cases recorded by Meineot, 24, and of 34 fatal cases recorded by Ballard, 7 were fed by the breast exclusively, making a total of 1943 fatal cases, of which but or about 3 per cent. had the breast exclusively.

"These facts," says Keating, "speak volumes; they show that the manner of feeding is one of the most important factors in the production of diarrhœa; as long as children are nursed exclusively they suffer but little from diarrhœal disease, but in the same class of children as soon as the age is reached when other food is added, we find a very marked increase in its frequency. Children among the poor in tenements enjoy immunity from intestinal disease just in proportion as they are nursed at the breast, and just so long as they are so; but as soon as artificial feeding is begun diarrhœal diseases begin to be prevalent." (Keating, p. 64.)

These remarks apply equally well to calves. In the summer of 1890 and '91 I treated from 45 to 50 cases of scouring in calves. The calves averaged from 1 to 3 months old when attacked. They were usually allowed to suck until 3 or 4 weeks old, when they were hand-fed till 3 or 4 months old, at which time, if the season of the year was suitable, they were turned out in pasture.

With seven exceptions all the cases occurred between the time of weaning and turning out to pasture, and with three exceptions all the cases occurred during the summer months. Six cases occurred while the calf was suckling (morning and night); over forty while the calves were confined in pens and were being hand-fed, and only one after the calves were turned out to pasture. On one occasion calf after calf was attacked with scouring, two or three new cases occurring each day until there were upwards of a dozen calves sick at one time. Three had died, and nothing seemed to do any good until on close investigation we found that great numbers of the squashes, which were being fed the cows, were decayed. Their use was discontinued, and the scouring rapidly disappeared. That this was the cause of the trouble was proved by the fact that some weeks later the foreman, wishing to



use up the remainder of the squashes, to get them out of the way, fed them to the cows, with the result that more of the calves were attacked with the old trouble.

Injudicious feeding then of cow or calf, allowing the calf to overgorge itself, irregular feeding, feeding milk too hot or too cold, all unfavorable hygienic conditions, such as hot, close weather, over-crowding, bad ventilation, want of sunlight, want of exercise, want of bedding; any one of these or a combination of them tend to produce an unhealthy condition of the calf and favor chronic indigestion. "And this chronic dyspepsia (or indigestion, says Keating) is more important than all other factors as a predisposing cause of diarrhœal disease." Anything that lowers the vitality of the animal increases its liability to disease. On the other hand, "healthy digestion and perfect absorption" are the great obstacles to the "development of new varieties of bacteria," for, "although new varieties of bacteria are being introduced all the time, they fail to develop, because their number is small or the conditions favorable to their development are wanting."

Suckling calves escape because they are healthier; because their digestive organs have not been abused, and because their milk is sweet and pure and *free from bacteria*. While on the other hand, calves brought up by hand are usually more or less troubled with chronic indigestion from one or other of the causes already mentioned.

The pails and milking utensils and receptacles for milk are not usually so pure and clean as they ought to be, and partly for that reason, and in consequence of the hot weather in summer, the milk often swarms with germ life, and is sour and acid from fermentation having already commenced, so that when taken into the stomach, especially if taken in large quantity, and in hot weather when the system is enervated, and there is a low state of vitality, the digestive power is to a great extent lost, food will ferment and produce irritating acids and ptomains, which in turn produce the symptoms which we know as "Scouring in Calves."

*Symptoms.*—The symptoms of acute mycotic diarrhœa in calves are well marked. The onset is usually sudden. One of the first symptoms noticed is usually the want of appetite. The calf refuses food entirely; the tail and buttocks are noticed to be foul and covered with a dirty, yellowish white discharge; its eyes appear sunken, there is often a discharge from both nose and eyes; the nose is usually dry; it rapidly loses flesh and strength; it lies continually in a semi-comatose condition with its eyes wide open,



and it has not even vitality to brush off the flies that are attracted by the sour-smelling evacuation; if made to rise it will stagger and appear weak. The abdominal walls appear flat and collapsed; its extremities are cold; its muscles become flabby; sometimes when it has been lying with its head round to its side, when made to move the muscles of the neck will have contracted so that it is unable to straighten its neck; it keeps continually pressing its teeth against its gums, causing a peculiar, rubbing noise. The pulse is rapid and weak and hard to count. The temperature is usually elevated.

This disease runs a particularly rapid course, the severe symptoms seldom lasting over 48 hours, and in some cases it reaches a fatal termination in from 8 to 10 hours. Three cases have come under my notice where the calves were seemingly well in the evening and were found dead the following morning.

In simple dyspeptic diarrhea, while the symptoms may sometimes develop almost as rapidly, yet they are not so severe, there is not the sunken appearance of the eyes; the calf does not lie in the same semi-comatose condition; there is not the same evidence of nervous depression, but it appears brighter; it pays more attention to surrounding objects; there is no rise in temperature, and the appetite is not entirely gone.

The prognosis in all diarrrhœal diseases should be guarded if the symptoms are severe; if the patient lies in a comatose condition, with no appetite, sunken eyes and profuse diarrrhœa; especially if the hygienic conditions are poor, then the prognosis is unfavorable; if, on the contrary, the appetite is not altogether gone, if the eyes are bright and the hygienic conditions and sanitary surroundings are good, the prognosis is much more favorable.

*Post-mortem appearances.*—In making autopsies on calves dying from this disease, one cannot help noticing the marked absence of lesions, when compared with the great severity of the symptoms.

This is fully accounted for, however, when we remember that the process is not inflammatory, but through acute fermentation in the gastro intestinal tract a poisonous substance is produced, which affects primarily the nerve centres, causing nervous depression and heart failure. If this process were continued for a sufficient length of time, inflammatory changes would take place; as it is death usually occurs before the inflammatory lesions are sufficiently well marked to be noticeable to the naked eye.

In ten post-mortem examinations which I have made in calves dying from "acute mycotic diarrrhœa," the examinations were held within a few hours after death, and the appearances observed were in all cases practically the same.



The first thing that strikes one in looking at the body is the rapidity with which emaciation has gone on, and the completely collapsed condition of the abdominal walls. The eyes are sunken, there is discharge from both eyes and nose; the tail is invariably soiled. On making an incision the first point to be noticed is the pale, white character of the muscles and intestines; the lungs appear normal except for hypostatic congestion; the heart usually contains a quantity of dark colored blood in both sides; the heart muscles are flabby and soft.

The intestines contain dirty white liquid, consisting of indigested food and particles of curdled milk. In most instances the mucous membrane is soft and easily separated, but it must be remembered that it is usually hot weather and the post-mortem changes are very rapid.

The stomach usually contains a quantity of frothy, undigested food, liquid food, the mucous membrane are all pale in color and have a washed-out appearance.

Other abdominal organs appear normal; notwithstanding the absence of pathological changes; however, the conditions would not be easily mistaken. The flabby condition of the buttocks, sunken eyes, paleness of intestinal organs, all tell a tale that would enable one to recognize a case, even if there was no history to guide him.

*Treatment.*—Scouring in calves is an exceedingly indefinite term; it seems to include all cases of simple dyspeptic diarrhœa, acute mycotic diarrhœa, and even the more chronic forms take shelter under its wing; and in considering the treatment to be adopted, while the general plan of treatment is the same in all, yet the success attending treatment in the more severe forms is usually far from encouraging.

The essential points to be remembered in treating a case of acute mycotic diarrhœa are first and foremost to sustain and strengthen the heart and system generally, to allay nervous irritation and to stop diarrhœal discharges.

The treatment with which I have had the greatest success is to clear out the gastro intestinal tract with laxative medicine (nothing answers the purpose better than Castor Oil, two or three ounces), to stop all milk diet for from twelve to forty-eight hours, and to support the system with brandy and eggs and oatmeal water. The brandy and water should be used freely.

Opium is a good heart tonic, and at the same time it diminishes the excessive hyper-peristaltic movements of the bowels.



Probably Dover's Powder is as good a form as any in which it can be given.

Where there is much stupor Chlorodyal or Specæ is preferable to opium. Sometimes suppositories of opium are of great value.

It should always be borne in mind that the simpler the medicinal treatment the better. Laxative medicine clears the intestinal tract of all irritating substances and products of fermentation, allowing it to begin afresh, "so to speak." After from twenty-four to forty-eight hours have elapsed probably the best results are obtained by allowing the calf to suck a little, if it will. If it refuses, then a very little diluted sterilized milk (not more than one half pint at a time) may be given with the brandy and eggs and some preparation of opium.

Medicinal treatment, however, is of secondary importance to dietetic and hygienic treatment; good air, pure air, and plenty of it, is an absolute necessity; nothing is more depressing, especially in summer weather, than for a sick animal to be shut up in a hot, close pen with little light or air; and when we remember that these are cases of "poisoning, with great nervous depression of the heart and system generally, and that we are not treating intestinal catarrh, nor intestinal inflammation, although intestinal inflammation is one of the results that is likely to follow if the patient survives the first overwhelming shock of the poison," the necessity for pure air and good light and clean surroundings is still further emphasized.

During convalescence too much care cannot be taken; if the calf is very young it should be allowed to suck a cow that has lately come in; if that is impossible then it should be fed scalded milk for some time, and the greatest care should be taken with the surrounding hygienic conditions.

Diarrhœal diseases are to a great extent preventable; if "scouring" is due to the introduction of micro-organisms, and if conditions favoring the growth of micro-organisms favor the development of the disease, then it follows as a natural consequence that the removal of these conditions will be followed by a corresponding decrease in the prevalence of the disease. It is most important, then, that the milk should be kept in as cool a place as possible, the utensils ought to be scalded both before and after using (in consequence of the difficulty in keeping them clean, wooden pails should not be used).

The milker's hands and the udder should both be washed be-



fore milking, and in every way an endeavor should be made to keep the milk fresh and sweet, and *free from bacteria*.

Further, the calves should be kept in as strong and healthy a condition as possible; the pens in which they are kept should have good light and plenty of fresh air; these are just as essential to the healthy development of animal life as of plant life. Dry bedding and plenty of it is another item that is too often neglected. The calf pens are usually in a dirty, filthy condition; on the average farm they are not cleaned out till a wet day comes round, when the hired man does odd jobs around the buildings. Nothing is worse for young stock of any kind than to be compelled to lie in their own wet and filth.

Another important matter is the water supply. Calves will drink a large quantity of water if they have free access to it; but when the wells are situated in or near the barn yard, more or less of the surface drainage must find its way into the well and contaminate the water supply.

In conclusion, the whole sum and substance of prevention is *hygienic*. Hygienic is of paramount importance; unfortunately, however, farmers do not realize the importance of the subject, and until they do, "Scouring in Calves" will remain as much of a mystery and a source of loss to the farmer as it is to-day.

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## BOVINE TUBERCULOSIS.\*

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BY JOHN M. PARKER.

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I am pleased to have this opportunity of bringing the subject of Bovine Tuberculosis before you, not because I have anything particularly new or original to present to you, but because it is a matter of special importance and because I wish to call your attention especially to the sanitary and hygienic aspects of the subject, which have been too much neglected.

As you are aware, all domestic animals are more or less subject to Tuberculosis. Dairy cattle however, in consequence of their mode of life and because of the heavy drain on their system through excessive breeding and milking, are more predisposed than any other of the domestic animals.

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\* Read before the Haverhill Med. Club, April, 1893.



Of the different breeds of cattle, the delicate, highly bred Jersey is probably the most susceptible, while the hardy native breeds are most exempt.

The early physical diagnosis of Bovine Tuberculosis is difficult; the symptoms are very meagre, and in fact in some cases, even when the disease is well advanced, there is seemingly little alteration in the health of the animal.

For example, in that form of Tuberculosis known as "Perl-sucht" or "Pearl disease" of cattle, where the serous membranes are covered with the peculiar characteristic nodular masses, the animal may be in a seemingly perfectly healthy condition.

At other times the only symptoms observable may be enlargement or tumefaction of the external lymphatic glands, with possibly tubercular mastitis, in which condition there may be a characteristic hard and knotted condition of the udder which is devoid of sensibility and is nonsecretive, or there may be a "diffuse and uniform enlargement and induration" with "functional activity to a greater or less degree."

These symptoms, however, would be sufficient, especially with a previous history of tuberculosis in the herd, to condemn the animal.

Again there may be indigestion and persistent tympanitis from the enlarged bronchial glands pressing in the œsophagus, and so mechanically preventing regurgitation of food or gas from the stomach.

Persistent œstrum or heat with barrenness, especially when there is a harsh, unthrifty condition of the coat and a general loss of condition, must be looked upon with suspicion.

Tubercular Arthritis is also common in dairy cattle.

The most common form of tuberculosis, however, is where there is an almost characteristic chronic cough; on exertion the breathing becomes hurried and more labored and is usually accompanied or followed by the cough. Auscultation and percussion show a more or less diseased condition of the lungs. There is usually more or less marked tumefaction of one or more of the superficial lymphatic glands. There is often scouring, the buttocks being in a dirty state. The temperature may or may not be altered and the pulse but little affected.

The only positive diagnostic symptom is the finding of the bacilli in either the nasal or vaginal discharge, pharyngeal mucus, or the milk.

The microscopical examination of the nasal discharge, when present, usually yields the best results.

The only other method in use as aids to diagnosis are the inoculation of the suspected animal with Koch's tuberculin and the inoculation of rabbits or guinea pigs with either discharge or milk.

The first of these methods (Koch's tuberculin) has been extensively used and highly recommended by both European and American investigators, for diagnostic purposes, and while it has not yet been recognized as an infallible diagnostic agent, the results have been sufficiently encouraging to warrant further trial and investigation.

The second of these methods, the inoculation of rabbits or guinea pigs with the milk or the discharge from a suspected animal, will probably never be brought into general use by the ordinary practitioner. In a suspicious case, however, it is often of the greatest value as an aid to diagnosis.

*Aetiology.*—As you are aware the immediate cause of Bovine Tuberculosis is the same as in the human family (viz. Koch's bacilli).

The bacilli do not always present the same appearance however, certain "morphological differences are found," and "under different circumstances and within limits the morphology of the tubercle bacilli varies with its environments." Thus tubercle bacilli from the nodulus of "perlsucht" are generally shorter and thicker than those from the human being. Those found in cows' milk again approach more nearly to the familiar rod shaped bacilli found in the human sputa; but while minute morphological differences can be detected in the tubercle bacilli of different species of animals, the general characters and characteristics of staining and culture are the same in them all.

In considering the aetiology of Bovine Tuberculosis there are two natural groupings into which the methods of infection can be divided.

The first and most important being the introduction of the bacilli through the respiratory tract.

The second, the direct introduction of the germ through congenital or hereditary transmission, or through eating or drinking tuberculous meat or milk.

In considering the first group, it is necessary to take a generally broad view of the subject and include all sources from which the tubercle bacilli can gain access to the atmosphere, whether that source is a consumptive human being or a tubercular cow matters not. *Once they gain entrance to the atmosphere, from whatever source they come, they are equally dangerous.*



The two most important means by which the bacilli can gain admittance to the atmosphere are: First, by the expectorations of consumptives.

Second, by the nasal discharge of diseased animals.

In reviewing the work on the subject of phthisical expectorations, in the *Annual of Medical Science* for 1890, Whitaker says:

"The work of the year has established almost to universal conviction that pulmonary tuberculosis is caused exclusively by inhalation of dried sputum." This, the original postulate of Koch, met its conclusive proof in the studies of Cornet; "it is not," he says, "the breath of the consumptive which is dangerous, but singly and alone the inhalation of the dried sputum which is mixed with the dust of the floor."

"The whole question of infection," he goes on to say, "has in the past year narrowed itself down to infection by sputum and by milk, and this fact may be regarded as the acquisition of the year." (*Man. of Med. Sc.*, P. A 8, 1890.)

We can easily understand therefore how a consumptive person having charge of a dairy herd must become a source of danger to that herd, and might become a source of greater danger to a healthy herd than even the introduction of a tuberculous animal.

An instance was related to me some time ago by one of the State Board of Cattle Commissioners having a direct bearing on this subject. In his capacity of State Inspector, he was called to see a young heifer which was ailing. There was no previous history of disease in the herd; all the animals, so far as could be traced, were perfectly healthy; no new animals had been brought in; the bull used for service was a young, healthy animal, with no trace of disease; and yet unmistakable symptoms of tuberculosis began to develop in this young heifer. (These on post mortem examination proved to be tuberculous.)

Here was something of a puzzle, which was easily explained when it appeared on conversation that one of the attendants was far gone with acute phthisis. And I believe if this matter were carefully investigated, like causes would be found far more common than is generally supposed.

The second source of danger, viz. the nasal discharge of diseased animals, is analogous to the expectorations of human consumptives.

Cattle do not actually expectorate, but we must remember their bodies are not in the upright position of a human being, their heads are held lower and consequently any discharge from

the lungs runs freely from the nasal passages; in this way the manger and woodwork become covered with the discharge, which dries, and subsequently particles becoming detached, mix with the dust and dirt, and become a source of danger to the neighboring animals.

The second group of ways, by which the bacilli may gain entrance to the animal body, is by direct infection through eating or drinking tuberculous meat or milk or by direct hereditary transmission.

In the matter of diseased meat, the divergence of opinion on the subject is peculiar.

Bollinger, Kastner, Nocard, and others have come to the conclusion "that the flesh of tuberculous animals is only exceptionally dangerous and even in these exceptional cases it is dangerous only in a slight degree."

Other observers hold the opposite opinion, and at the Congress for the study of Tuberculosis, held in France in 1889, and at the Congress of Hygiene and Demography, held in London in 1890, resolutions were passed recommending absolute seizure of meat wherever there was any trace of disease in the carcass. Notwithstanding their action in the matter, however, there is a general tendency both in Europe and in this country to take a more moderate view, and when the lesions are found to be localized and the flesh in good condition the carcass is not generally condemned.

With regard to milk from tuberculous animals, the experiments of Ernst and Peters, Hirschberger, and others, have demonstrated the fact that milk from tuberculous cows is dangerous, even when the udder is perfectly healthy.

The experiments of Hirschberger, which are exceedingly interesting, show that the "danger varies at different times, being present when spores from some focus of infection happened to be absorbed into the blood current and were excreted by the milk." These experiments also showed that the milk of tuberculous cows is dangerous in 55 per cent. of cases.

Bollinger, however, showed that the virulence was to a great extent lost when the milk was mixed with that of healthy cows. Negative results being obtained in one case "with dilution of 1 in 40, in another 1 in 50, in another 1 in 100." "Milk is rendered less dangerous by admixture with other milk," and while "the advancing disease in one cow increases the virulence of its milk, dilution with milk of other cows lessens the virulence."

(Annual of Medical Science, 1890, P. A 3.)



So that while there is danger in using milk from tuberculous cows, the actual danger is not so great as one might suppose if the results of laboratory experiments only were taken into consideration. The danger is principally confined to people having one cow for family use, or to children being fed with milk from a cow reserved for that purpose.

In considering the direct hereditary transmission of tuberculosis, I would call your attention to a case reported in the *Journal of Comparative Pathology* (March, 1892). The article goes on to say "that in the body of a man who had died of disseminated tuberculosis of the pharynx, larynx, lungs, intestine, kidneys, prostate, and rectum, the vesiculæ seminales were full of semen which were found to be swarming with tubercle bacilli. The other genito-urinary organs were healthy." (*Br. Med. Jour.*)

This case is peculiarly interesting and instructive, and following in the same line McFadyen reports a case of congenital tuberculosis in a calf five days old, in several of which the lymphatic glands "were enlarged to the size of a large nut, and caseous toward the centre. Some small nodules the size of a pea were seated in the liver substance itself, and these were also in a state of caseous degeneration;" "and on staining cover glass preparations there was no difficulty in discovering tubercle bacilli."

That this mode of transmission of tuberculosis is uncommon, not to say rare, is shown by the fact that up to the present time there have been observed only six cases of indubitable congenital tuberculosis in the calf, that is to say, cases in which the possibility of the disease having had an extra uterine origin was excluded, and in which the exact nature of the lesions was established by the discovery of Koch's bacilli in them. In three of these cases the lesions were discovered in the unborn foetus, in the fourth the calf was dead born, and in the other two the animal was under fourteen days old. The writer goes on to say, "It is probably not wide of the mark to estimate tuberculosis among dairy cows at 3 per cent., and yet we know from careful statistics furnished by the large continental abattoirs that the proportion of tuberculosis among calves under one month old does not exceed 1 in 70,000."

This would tend to show that direct transmission of tuberculosis from parent to offspring is rare. As a rule, the offspring of tuberculous parents is weakly and predisposed to disease in consequence of the want of constitutional vigor to resist it. In the great majority of cases tuberculosis is not directly transmitted; there is simply a constitutional weakness and predisposition,

not perhaps especially to tuberculosis, but to disease in general.

Among the many predisposing causes of tuberculosis I would class anything that lowers or tends to lower the vitality of the system, anything that decreases or tends to decrease the disease resisting powers which all healthy animals possess to a high degree ; and hereditary predisposition is probably one of the foremost of these causes, because for generations cattle have been bred for their milk supply with a total and suicidal disregard for the general health and strength of the animal.

Among the causes that have tended to produce this peculiar constitutional predisposition of dairy cattle probably the most important are confinement and want of exercise, poor ventilation and bad sanitary condition generally, with injudicious feeding and breeding.

A German journal states "that in the Canton Feirburg, in 1890, out of 14,142 housed animals there were 249 deaths, and 8.7 of these deaths were due to tuberculosis, while in the district in which the cattle were fed out of doors, the deaths from tuberculosis amounted to only 3 per cent. of the total losses—that is to say, in the districts where the animals were almost constantly housed and fed unnaturally the deaths were  $2\frac{1}{2}$  times greater than where the animals were kept out of doors and fed naturally."

This is only what one would expect, as it is in close, ill-ventilated barns that the bacilli would naturally collect ; and apparently no better proof of this could be found than the remarkable results obtained through improvement in ventilation in the French Cavalry Stables.

After sanitary measures were adopted cases of glanders in the cavalry horses fell from 23.32 per 1,000 in 1874-52 to 7.24 per 1,000 in 1862-66, and during the same period cases of non-specific diseases of the lungs fell from 104.7 per 1,000 to 3.59 per 1,000. The only condition present to account for this remarkable change was increased facility for ventilation and increased cubic space. (Paper read at Vet. Con. of H. & D., 1890.)

Now we know that the average dairy barn is very imperfect in this respect. I have seen barns so close that a lantern hung up in the barn in the evening would go out before morning for want of air.

One can hardly go into any barn in the morning without feeling the hot, close smell of the cattle, so strong sometimes as to be almost overpowering, and yet the average farmer will tell you



when he has a barn of this description that he has a nice, comfortable, warm barn. The hotter and closer it is the more comfortable he seems to consider it.

Drainage is another important matter that is too often entirely neglected; it is just as important to have the cow barn and yard well drained as it is to have the house and surroundings well drained.

The statistics collected by Dr. Buchanan on this subject are highly suggestive, and their importance must be my excuse for their introduction here.

In Salisbury, Eng., after the introduction of improved drainage, the annual death rate from phthisis fell from  $44\frac{1}{2}$  per 10,000 to  $22\frac{1}{3}$  per 10,000 between 1837-64. In Banbury the phthisis death rate fell in the same length of time from  $26\frac{2}{3}$  to  $15\frac{3}{5}$  per 10,000.

In the same period of time in the towns of Ely, Rugby, Worthing, Macclesfield, Leicester, Newport, the death rate fell 47 per cent., 43 per cent., 36 per cent., 51 per cent., 52 per cent., and 52 per cent. respectively, in consequence of improvement in drainage alone. And yet this is almost the last thing the farmer thinks about.

Beneath and around the barns stand piles of rotting manure. The urine soaks into and through the wooden floor and drips into the cellar beneath; while the yards and surroundings are usually a mass of decaying animal and vegetable matter.

The surface water from this mass of filth, often draining into the well, which is usually located in or near the barn yard, forming a cesspool for the collection of surface drainage.

As for good light, every school boy knows how essential it is, yet if not wanting entirely, the light is often a mere apology for that commodity. Cattle need light every whit as much as either plant or human being, and yet I could take you to-day to barns that are supposed to be first class in every respect, where one needs a lantern to find out whether the pens are occupied or not.

Perhaps, however, the most important factor in predisposing the dairy cattle to tuberculosis is the injudicious management of the dairy stock themselves.

It is generally recognized in the medical profession that when a woman becomes pregnant she should not be allowed to nurse her child, otherwise both herself and her offspring will be the worse for it, both will suffer in health.

Fagge says, "In the female, childbearing seems to play an important part among the causes of phthisis; and according to

Dr. Pollock it is not so much prolonged suckling that seems to set up phthisis, but the mere fact of suckling at all. Cases associated with childbirth generally run a particularly acute course."

In referring to the foregoing Dr. Pye Smith says, "These considerations are so important in regard to life insurance that Sir Risdom Bennett and myself have for several years advised the office with which we are connected to count all deaths of mothers 'in childbed' or 'after delivery' as due to phthisis, unless there is explicit evidence of previous good health." This is, possibly, an extreme view, but if it is the case, or even if it is only in part true, what must be the result when the dairy cow is not only milked when pregnant, but milked right up to the time of calving; they are fed so as to produce the greatest possible quantity of milk, and every year the dairy cow is expected to bear a calf with unfailing regularity; and when one remembers that this process is kept up, not for one generation only, but for generation after generation, the wonder is that tuberculosis is not far more common than it is, for we have here *just the very conditions that are most fitted for its development*. Constitutions weakened and vitality lowered through generations of injudicious breeding along with poor sanitary conditions, poor ventilation, poor light, and bad drainage, *what more do we want, what more could we have, even if we wanted to propagate the disease instead of controlling it?*

*Prevention.*—In considering the measures to be adopted by the authorities for the purpose of controlling the spread of tuberculosis, we must not forget that the disease is not confined to one species of animal, but it may be communicated to and by all kinds of animals, and so long as there remains one tuberculous individual (whether man or animal) there will be danger to all other animals.

But while it is not possible to eradicate it by the process of killing off diseased animals, it is possible to control it to a great extent by improving the surroundings and the sanitary and hygienic conditions of the cattle, and by changing the present method of breeding and feeding to one more in accordance with the dictates of common sense.

In the first place the present provision of the state law ought to be thoroughly enforced; a competent veterinary surgeon should be appointed as inspector in every city and town of the commonwealth; every dairy should be licensed and periodically inspected (say monthly or bi-monthly); each cow ought to be registered and carefully examined for any trace of disease, an especial examination being made of the udders; and no cow ought to be used for



dairy purposes unless it is in a generally healthy condition

And further, as suggested by Prof. Wally, "Whenever such disease is detected, power should be given to the inspector to remove the animal to a sanitarium, or other place, for further observation, or to an abattoir for slaughter; if in the latter case it were ultimately found on autopsy that no disease existed of a nature likely to render the meat or milk harmful, compensation should be given the owner of the cow."

The barns ought also to be periodically inspected for their sanitary condition, which should include the cubic space for each animal, ventilation, drainage, light, cleanliness, water supply, etc.

In this connection I would call your attention to the granting of licenses to dairies in other countries.

In Scotland an act was passed called "The dairies, cow sheds and milk shops order of 1885," in which the police committee as local sanitary authority are empowered to make regulations *inter alia*, for prescribing and regulating the lighting, ventilating, cleansing, drainage, and water supply of dairies and cow-sheds in the occupation of persons following the trade of cow-keepers or dairy men, and the order declares that no cow-shed shall be occupied, if new, until provision is made "to the reasonable satisfaction of the local authority for the lighting and the ventilation, including air-space, etc.; and no cow-shed whatever shall continue to be occupied if, and as long as the lighting and ventilation, including air-space, are not such as are necessary and proper for the health and good condition of the cattle therein;" and in a report to the Glasgow Board of Health, Dr. Russell, the medical officer of health, recommends—

1st, "That the registration, regulation, and control of byers should be placed in control of the sanitary authority.

2d, "That in all existing byers the cubic space should be raised to 600 cubic feet; that in all new byers it should be 800 cubic feet, and that the regulations generally as to lighting, ventilation, drainage, cleansing, and water supply should be carefully revised so as to give full effect to the mind of the sanitary authority, and thereby enable them to discharge themselves of the responsibility imposed upon them by the Legislature." (Mc. F., vol., p. 96.)

Denmark and Italy are, I believe, the only countries in the Continent of Europe that pay any special attention to the sanitary condition of the dairies; Great Britain and other countries are fast beginning to realize the importance of the subject, and

it would be well if some such regulation as the above, regulating the granting of licenses to dairies, were in force here.

Again in the matter of meat supply public abattoirs should be established and all private abattoirs should be abolished or licensed and made subject to inspection at all times.

France and Germany take the lead in this respect. In Berlin all meat is inspected and stamped with a government stamp before being exposed for sale.

Special officers are appointed to see that no meat is smuggled in without inspection, and all meat found exposed for sale without the government stamp is confiscated and the seller prosecuted.

“In Berlin the staff engaged in meat inspection at the central abattoir comprises (besides common workmen) 250 persons, including the director, 19 veterinary surgeons, 6 assistant veterinary surgeons; other 15 veterinary surgeons are engaged in the inspection of carcasses slaughtered and brought into the city.” (Jour. Com. Path., vol. 3, p. 188.)

Now, while it might not be advisable to go the length Germany has gone in the matter, yet here we have not gone far enough. It is the duty of the government to protect the public by making meat inspection compulsory and to provide competent meat inspectors. It is much more the duty of the government to see that dairies, from which the public get their milk supply, are clean and in good order and that the sanitary conditions and surroundings are as nearly perfect as possible.

It is true that an enforcement of dairy inspection might result in hardship to certain individuals, but the public have a right to claim protection.

It may also be urged that it would be almost impossible to control the milk supply of a large city like Boston, which receives its milk supply from all the surrounding country, but it seems to me it would be a simple enough matter if the State authorities had the power to grant licenses and were to divide the State into districts, each district being in charge of an inspector, whose duty it would be to inspect all dairies in his district; no person being allowed to sell milk without a license.

And, in conclusion, until some regulations are in force here, and until greater attention is paid to the health and constitution of the dairy stock and to the cleanliness and sanitary condition of the barns and their surroundings, all efforts to control and reduce tuberculosis in our dairy cattle must result in failure.



# EDITORIAL.

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## APOLOGY.

It is an ill wind which blows nobody good, and our extreme regret at the necessary temporary suspension in the publication of the JOURNAL OF COMPARATIVE MEDICINE AND VETERINARY ARCHIVES has been somewhat lessened by the many letters which have assured us how much the JOURNAL is appreciated and valued by our readers.

A series of mishaps seemed to have combined to prevent the publication during the past few months. For the first, a worthless clerk was responsible, for losing some important copy and plates. Pressure of private business prevented the Editors from replacing the matter at once. As the July number was about ready for the printer a suit in Court over the title of the property which the JOURNAL rented for offices caused the editors to vacate, and all matter was for some time unavailable in a storage warehouse. Added to this, illness of the editors prevented the extra labor caused by the delays, which would have been necessary to issue a number. Our readers will be glad to hear that Dr. W. A. Conklin has recovered entirely from an almost fatal case of typhoid fever.

In resuming the publication, still under some difficulties, we tender to our readers our most sincere apologies for the intermission, and assure them that additional work and energy will be used to produce numbers which shall compensate for the missing ones.

## SUBSCRIPTIONS.

Subscriptions which have been paid in advance for 1893 will be credited until June, 1894.

Unpaid subscriptions commencing Jan. 1st, 1893, will be charged for six numbers to December, 1893, \$1.50.

New subscriptions for the current year (January, February and March numbers can be supplied) will be \$1.50.

Address all communications and payments :—JOURNAL COMPARATIVE MEDICINE AND VETERINARY ARCHIVES, 155 West 56th Street, New York.

# UNITED STATES VETERINARY MEDICAL ASSOCIATION.

One year ago, in Boston, at the twenty-ninth annual meeting of the United States Veterinary Medical Association, a considerable amount of enthusiasm was aroused by the resolutions and discussions which planned for and considered the ways and means which would be adopted to prepare for the thirtieth annual meeting of the Association, and the first Veterinary Congress of America. Chicago, the seat of the World's Fair, was chosen, for many reasons, as it has been by the numerous other congresses which have met in America this year. How judicious this choice has been, we will be better able to know in another month, when the meeting has been held and is one of our records of the past. The committees were appointed with care by the officers of the Association, following the laws of specialization, and fitting into each section and department of work such members as seemed adapted to the work required by the demands of all. Hearty co-operation was expected of each individual and association of individuals on the committees, and undoubtedly each and all formed the best of resolutions to do his utmost to deserve the trust imposed, and to put aside part of his own personal affairs, in order to contribute to the success of the professional organization. But good resolutions alone will not pave the way smoothly, even to Chicago. Many a member, when he left the hospitable boards of our Boston meeting, and returned from the stimulating intercourse with his colleagues to the routine of pneumonia and greasy-heels, colic and corns, and feed bills and collections, forgot and neglected the æsthetic part of his professional duty, and the affairs of the Association fell into the position of the hedge-hog which was the mutual property of two boys: both boys saw him; one got his fingers bitten catching him, and then labored daily feeding him until show time came, when the other boy appeared and claimed his share of partnership in the possession of the animal. I very much fear that many of us will go to Chicago most shamelessly, and with pride claim partnership in all that is good in the Association, while we have left all care and labor in feeding and nursing the beast to our diligent and efficient Secretary, Dr. Hoskins, and a few others who have aided him.

The following reports of committee meetings and circulars are an outline of what has been done for our benefit :

JANUARY 1, 1893.

*Notice to all Members United States Veterinary Medical Association:* Upon recommendation of the Comitia Minora, the following



resolution, approved by the Association, carrying with it the power of levying an assessment, was adopted at Boston, September 20, 1892:

*Resolved*, That a special assessment of \$5.00 be levied on each member to defray the extraordinary expenses that will be incurred by the International Meeting at Chicago in 1893.

Said assessment is now due and may be sent to the Secretary's office by check, money order or draft.

W. HORACE HOSKINS, Secretary.

W. L. WILLIAMS, President.

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*Notice to Members United States Veterinary Medical Association:* I have the pleasure of announcing to the members of the Association, and the profession in general at home and abroad, that there will be two valuable contributions offered to our Association at its International Meeting, which should attract the attention and interest of the entire profession of the world. They are the result of several years' investigation on the subject of "Swine Plague" and "Hog Cholera" and "Contagious Pleuro-Pneumonia."

The first paper will be offered jointly by Dr. A. W. Clement and Dr. William Welch. The second paper will be offered by Dr. A. W. Clement, and it will be accompanied by the most exhaustive collection of pathological specimens which have ever been gathered together in the world.

W. HORACE HOSKINS, Secretary.

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*To the Members of the U. S. Veterinary Medical Association and all Members of the Veterinary Profession in the United States and throughout the world:* The United States Veterinary Medical Association has selected the dates of October 17th, 18th, 19th and 20th for their International Congress, to be held on the grounds of the World's Fair at Chicago, Ill., in conjunction with the World's Fair Auxiliary Congresses; and all National, State and local associations throughout the world are hereby extended a most cordial invitation to send delegates to the Congress, and to take part in the deliberations of the same.

Every arrangement that is possible will be made in the interest of all those who desire to attend, and information as to railroad rates, hotel accommodations, and all other conveniences will be cheerfully afforded by addressing the Secretary of the Association.

W. HORACE HOSKINS, Secretary,

12 South 37th St., Philadelphia, Pa.

By order of the President,

W. L. WILLIAMS.

The Committee on Prizes of the United States Veterinary Medical Association desires to call the attention of its members to the following announcement: It is the purpose of the Association to give the sum of \$50, to which the editors of the *American Veterinary Review* and JOURNAL OF COMPARATIVE MEDICINE have each added \$25, as a first prize for the best paper that may be submitted to them on any professional subject.

In addition to this the editors of the *American Veterinary Review* and the JOURNAL OF COMPARATIVE MEDICINE will each give plate to the value of \$25, making a total prize of \$50 for the second best paper, as above. Paper for this competition must be legibly written and in the hands of the committee by August 1, next.

In compliance with an order of the Association, the prize paper must be read and defended at one of the regular meetings. The successful paper in this competition will probably be called up at the coming annual meeting in Chicago, at which time and place the prizes will be awarded, the final award being made by the committee.

The article is then to become the property of the Association.

Competitors shall use a *nom de plume*, retaining in their own way the means of after identification.

Paper should be addressed to Charles P. Lyman, chairman, 50 Village Street, Boston, Mass.

C. P. LYMAN, Chairman, 50 Village St., Boston,	} Committee.
W. H. LOWE, 190 Ellison St., Paterson, N. J.,	
L. MCLEAN, 14-16 Nevins St., Brooklyn, N. Y.,	

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*To the Members of the United States Veterinary Medical Association and the Profession in general:* I have the pleasure of announcing that Prof. Olaf Schwartzkopf, of St. Paul, Minnesota, will offer a paper at the International Veterinary Congress in Chicago, in October next, entitled "Comparative Psychology of our Domestic Animals." A paper the outcome of studies, investigations and close attention given by the author, and his recognized ability as a writer and teacher makes the promise of this paper one of exceptional merit.

The reprints and papers of the last two meetings of the United States Veterinary Medical Association at Washington and Boston will be ready for delivery about the 20th of May. All those who are not members of the Association but who are desirous of receiving the same may obtain them through the secretary at the cost of their publication.



The new application blanks are now ready, and may be obtained from any of the assistant state secretaries or from the office of the general secretary upon application. All applications for membership must be filed in the office of the secretary on or before the first of October next, in order to be insured consideration at the Chicago meeting.

By order of the President.

W. L. WILLIAMS,  
Lafayette, Ind.

W. HORACE HOSKINS, Secretary,  
12 South 37th Street,  
Philadelphia, Pa.

PHILADELPHIA, May 25, 1893.

*To the Members of the United States Veterinary Medical Association :*

The reprints of our proceedings, containing a complete account of our meetings at Washington and Boston for 1891-2, will emerge from the printer's hands in the next ten days.

These reprints will contain all the papers, reports of committees ; discussion ; with a list of officers, past and present ; those who have resigned ; the deceased members ; those dropped from the rolls ; those expelled, and much other information relative to the Association that it will be found of interest and value as a book of reference.

This book will be bound in cloth, with gilt top, for 25 cents, while the cost bound in paper will be but 5 cents. All those desiring that their copies shall be bound in gilt will immediately give notice to this office, and transmit 25 cents by postal note or postage stamps. Copies of these reprints will be issued to all members of the Association. To all others desiring a copy the exact cost of printing and binding will be charged for the same.

I desire to give notice at this time of the near approach of our International Congress at Chicago, and to say to the members that every one has a duty to perform in making this meeting a grand success. The officers and committees are actively at work, and the three leading subjects that are to be considered and discussed will be handled in a very thorough and interesting manner. The general committee reports will be of special interest, and in addition we have offered the following papers :

“Swine Plague and Hog Cholera,”—Drs. Welch and Clement.

“Contagious Pleuro-Pneumonia,”—Dr. A. W. Clement.

“Millet Disease of Horses,”—Dr. T. D. Hinebaugh.

“Fistulæ,”—Dr. M. H. Reynolds.

The consideration of our Association having a National char-

ter under the United States Government will be acted upon at this meeting.

A list of honorary members will be considered that has for its aim a proper recognition of veterinarians in every country of the world who have contributed largely to the general advancement of the profession.

Many other matters of equal importance will be taken up and disposed of at this meeting, and it is urged that every member of the Association shall lay aside his business and work and attend this coming meeting, as it will probably be the only International Congress ever held in America during the lives of the present membership of our Association; and its importance and value will wholly depend upon the united effort of those upon whom the responsibility of its success depends, and this is upon our members.

From time to time bulletins will be issued from the secretary's office, containing details of plans and arrangements, railroad rates, etc., in ample time for the proper preparation of our meeting, and at a time when the best rates may be obtained.

By order of the President.

W. L. WILLIAMS, President.  
Lafayette, Ind.

W. HORACE HOSKINS, Secretary,  
3452-54 Ludlow St., Phila., Pa.

*To the Members of the United States Veterinary Medical Association:* The Comitia Minora of this Association will convene in Chicago on October 16th for the discussion of all preliminary business and the consideration of all applicants for membership.

The officers of the Association will arrange for headquarters at one of the leading hotels, where they may be reached at certain hours by all those who desire information or assistance of any kind.

The Illinois Association will tender to the members of the Congress an evening entertainment on the lakeside, with a lunch, music, etc.

The members of the Local Committee of Arrangements in Chicago will place at the disposal of the members of the Congress one or more of their members during our stay in Chicago, to guide them to any place of amusement and point of interest in the city or the surroundings.

The resignation of Dr. M. Stalker on the Committee of Vet-



erinary Education has been accepted, and Dr. Niles, of Ames, Iowa, has been appointed in his place.

The officers have accepted a paper from Dr. T. D. Hinebauch, of Fargo, North Dakota, entitled "Millet Disease of Horses."

The local arrangements are rapidly being completed, and the Secretary will be glad to furnish information at any time, to any member of the profession, by forwarding their requests to his office.

W. HORACE HOSKINS, Secretary.

By direction of the President, Philadelphia, Pa.

W. L. WILLIAMS,  
Lafayette, Ind.

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U. S. VETERINARY MEDICAL ASSOCIATION.  
SECRETARY'S OFFICE.

PHILADELPHIA, July 1, 1893.

*To the Members of the Veterinary Profession :*

The First International Veterinary Congress to be held in America, will convene at the World's Fair, Chicago, Ill., October 16th, and will continue until the 20th, inclusive.

The special subjects to be considered at this Congress are: Veterinary Education, Tuberculosis, and Animal Food Supply.

Veterinarians from all parts of the world are cordially invited to attend, present papers and take part in the discussion.

All veterinarians in good standing may become members of this Congress on the payment of two dollars, which will entitle them to a copy of the proceedings.

All foreign Veterinary Colleges, Schools and Societies are requested to appoint delegates.

Papers on all subjects of interest to the veterinary profession are cordially solicited.

In order to receive proper assignment on the program, papers should be filed in the office of the Secretary at least two weeks before the opening of the Congress, together with the author's name and the title of his paper.

For further information address the Secretary,

W. HORACE HOSKINS, 3452-54 Ludlow Street,  
Philadelphia, Pa

INTERNATIONAL COMMITTEE.

R. S. Huidekoper, 155 West 56th St., N. Y. City.

A. Liautard, 141 West 54th St., N. Y. City.

D. E. Salmon, Bureau of Animal Industry, Washington, D. C.  
 A. H. Baker, 145 Michigan Avenue, Chicago, Ill.  
 J. H. Stickney, American Stables, Sudbury St., Boston, Mass.  
 Olof Schwartzkopff, 637 Cedar St., St. Paul, Minn.

EX-OFFICIO.

W. L. Williams, Bloomington, Ill.  
 A. W. Clement, 902 Cathedral St., Baltimore, Md.  
 W. Horace Hoskins, 3452-54 Ludlow St., Philadelphia, Pa.  
 J. L. Robertson, 409 Ninth Ave., N. Y. City.

MEETING OF THE COMITIA MINORA, INTERNATIONAL  
 COMMITTEE, AND OTHER COMMITTEES OF  
 THE UNITED STATES VETERINARY  
 MEDICAL ASSOCIATION.

The meeting was held in the office of Dr. Huidekoper, at 129 West 52d St., New York, May 20th, 1893, and was attended by the following members: A. W. Clement, of Baltimore, Vice-President; James L. Robertson, of New York, Treasurer; W. Horace Hoskins, Secretary; Leonard Pearson, Philadelphia, A. Liautard, New York. R. A. McLean, of Brooklyn, as a guest.

The Secretary called for report of the International Committee, who asked a delay of half an hour for preparation of same. The Secretary then read the following communication from the President, Dr. Williams:

PURDUE UNIVERSITY,  
 LAFAYETTE, IND., May 17th, '93. }

*Dr. W. Horace Hoskins, Sec'y U. S. V. M. A.*

DEAR DOCTOR:—Your notice of May 12th of meeting of committees of the United States Veterinary Medical Association at New York City on the 20th inst., to complete arrangements for International Meeting, duly at hand and noted.

I regret very much that my duties here forbid my attending, but I trust Dr. Clement will be present to act in my stead, and will cheerfully abide by the action taken by the International Committee or the Comitia Minora. I have little to suggest that is new.

The local arrangements at Chicago will be all right, and I shall be in Chicago within four to six weeks and complete the details as far as practicable at that date.

The dates to be assigned us for public mass meeting have not yet been decided upon, neither have the speakers, nor any one of them for this part.



Of these we should have five or six addresses twenty or thirty minutes long, and I suggest that the speakers be largely from foreign countries, possibly two from the United States and Canada, the others from England and continental Europe. All must, of course, be able to speak English, and make their addresses in our language.

I think Professors McEachran and Smith should be provided with or offered places on programme. Can they not have places on Veterinary Education?

As subjects for addresses in mass meeting I would respectfully suggest :

1. History of Veterinary Science.
2. Veterinary Science and National Economics.
3. Veterinary Science and National Health.
4. Veterinary Science in Relation to Ethics.
- 5.
- 6.

Will leave some blanks ; possibly those already suggested will be deemed unsatisfactory.

These topics should be settled at once, and proper persons for presenting them named, with alternates where practicable.

The Committee on Honorary members will doubtless submit a satisfactory report, and in making list of foreign veterinary associations and colleges I have little to suggest or knowledge to impart, but let me suggest for one thing that we try if possible to have representatives from Central and South America.

I have accepted a paper from Dr. M. H. Reynolds, Keosauqua, Iowa, on "Fistulæ" which comprises considerable work, and promises to be interesting.

Permit me to suggest that the matter of programme, its arrangement, etc., be well discussed, suggestions made as to general outline, and the details then committed to the judgment of a small committee to carry out the recommendations as far as practicable.

We can have all the hall room we wish, and in case the major subjects already fixed upon by the Association will require the full time of the meeting, I suggest that subordinate, or rather branch meetings be held for the consideration of other topics, to allow veterinarians to choose between two programmes, and attend the one of most interest. Some veterinarians may not care to hear discus-

sions on our major subjects. The details of such arrangements I would leave with Programme Committee. I have no further papers under consideration.

Any appointments which need immediate attention please refer to Dr. Clement, or in case the appointment should come from the International Committee, then, of [course, to Dr. Huidekoper.

This is all which now occurs to me, and should I have anything to add, will address you at New York, care of Dr. Liautard, either by telegraph or post.

Have written Mr. Bonney on several matters which I trust will be answered in time to lay the information before the meeting.

Wishing a successful meeting, and regretting my inability to be with you in person, I am

Very truly yours,

W. L. WILLIAMS.

The Secretary then read a letter from Dr. C. P. Lyman, of Boston.

HARVARD UNIVERSITY, }  
BOSTON, MASS., May 15th, '93. }

*W. H. Hoskins, D. V. S.,*  
*12 South 37th St.,*

MY DEAR DOCTOR:—Your favor of May 11th is received. I am sorry to say that I shall not be able to be present in New York on the 20th inst. As being the one appointed by the Comitia Minora at their last meeting in New York to see what could be done toward obtaining a national charter for our Association, I have to report the receipt of the following letter from Washington, dated February 11th, 1893, and signed by one of the United States Senators:

“It is now too late in the session to do anything with any new bill in this Congress, but if you have an act of incorporation drawn I think there will be no difficulty in getting it through Congress at next session. These bills are usually passed without objection. Any good lawyer could draw it for you.”

I should like to be further instructed by the committee as to whether I shall employ a lawyer to draw an act of incorporation for us as suggested by the Senator. There seems to be some good reason for thinking that Congress will be called early in the fall, and if we are to do anything it would seem to me that we had better be prepared to advance our request there at a very early date.



As Chairman of the Committee on prizes, I have to state that considerable work has been done, as a result of which, and through the kindness of the editors, we have been able to publish in the professional journals a notice asking that papers be submitted to the committee.

I am happy to be able to say that the form of this notice has finally assumed a shape that seems to be fairly acceptable to all those interested.

No papers have as yet been received.

Will you kindly bring these matters before the committee for me, and advise me of their further desires.

Yours very truly,

CHARLES P. LYMAN.

A letter from Dr. J. F. Winchester, Lawrence, Mass., was also read.

LAWRENCE, MASS., May 14th, '93.

*Dr. W. Horace Hoskins.*

DEAR DOCTOR:—Yours of the 12th at hand. It will be impossible for me to come to New York on the 20th. As to the work being done by the committee of which I am Chairman, I would say that Dr. Wyatt Johnson has promised an article on Cornstalk Disease and Contagious Pleuro-Pneumonia of the English. Dr. J. B. Paige will take up the subject of Tuberculosis. Dr. S. Stewart will attend to the Swine. Dr. Jos. Hughes has not even shown me the courtesy or good breeding to reply to either of two letters I have sent him suggesting that he take the subject of Actinomycosis. I will try in a general way to fill up the report, that it may be acceptable for the occasion.

Yours, etc.,

J. F. WINCHESTER.

The Secretary then read the list of those who were invited to report. They were the International Committee, Comitia Minora, Committee on Veterinary Education, Animal Food Committee and Committee on Tuberculosis.

The Secretary then asked that the names of the candidates for honorary membership be produced. This, however, could not be done, as the committee who had charge of making out the list had been too busy to complete it.

Dr. McLean asked whether persons who were honorary members were included among those whose expenses had to be paid.

The Chairman replied that it had already been decided not to pay their expenses.

Dr. Liautard moved that the committee be empowered to have a letter of invitation and circular, explaining the object of the Congress, written in English, French and German, and containing the names of those recommended by the committee for honorary membership, and that these letters be sent to the veterinary papers of the various countries with the request that publicity be given them. This motion was seconded and passed.

In reply to questions asked by some of the members, the Secretary stated that it had been resolved that three persons from each of the various countries should be the maximum number for honorary membership, and that these were to be selected by the committee for approval by the Association. He said also that if publicity were given to the names of those who had been selected as candidates for honorary membership, it would be an incentive for them to come to our meeting.

He said that it had been decided at the Boston meeting that any member could submit to the committee the name of any one whom he deemed worthy of membership. The names of worthy candidates should be put in print by July at the latest.

The Committee on Honorary Membership reported progress.

Dr. Huidekoper then read the invitation which he had formulated. It was considered sufficiently comprehensive, and needed only further development and greater detail.

The International Committee reported progress, and requested that they be given six days to complete their circular and be empowered to publish it.

The Secretary reported that the Pennsylvania Association stand ready to respond to any call that may be made by the officers in charge of the Congress, and that they will do everything in their power for the promotion of its success. They have appointed a committee for considering any work that may be designated by this Association, and they have also appointed a committee for the entertainment of foreign delegates on their way to Chicago.

The Secretary then called the attention of the Comitia Minora to the reapplication of John Doris, Jr. The latter was a graduate of the Cincinnati Veterinary College, and was rejected on the ground that he was a graduate of a school granting diplomas to minors. The school has now changed, and does not confer diplomas on those who are under twenty-one years of age. The Dean of the Faculty has written for the exact wording of the rejection of Dr. Doris, who will reapply for membership.

Adjourned to meet at the call of the Secretary.



The following program has been issued : 30th Annual Meeting of the United States Veterinary Medical Association and the first Veterinary Congress of America, World's Fair Memorial Art Palace, Michigan Avenue, foot of Adams Street, Chicago, Illinois, October 16, 17, 18, 19 and 20, '93.

*International Committee*—W. L. Williams, President, Bloomington, Ill.; A. W. Clement, Vice-President, 902 Cathedral St., Baltimore, Md.; W. Horace Hoskins, Secretary, 3452-54 Ludlow St., Philadelphia, Pa.; J. L. Robertson, Treasurer, 409 9th Ave., New York City; R. S. Huidekoper, Chairman, 155 W. 56th St., New York City; D. E. Salmon, Bureau of Animal Industry, Washington, D. C.; A. H. Baker, 145 Michigan Ave., Chicago, Ill.; J. H. Stickney, American Stables, Sudbury St., Boston, Mass.; Olaf Schwarzkopf, 445 Roberts St., St. Paul, Minn.

*Comitia Minora*—W. L. Williams, President, Bloomington, Ill.; A. W. Clement, Vice-President, 902 Cathedral St., Baltimore, Md.; W. Horace Hoskins, Secretary, 3452-54 Ludlow St., Philadelphia, Pa.; J. L. Robertson, Treasurer, 409 9th Ave., New York City; R. S. Huidekoper, 155 W. 56th St., New York City; A. Liautard, 141 W. 54th St., New York City; R. A. McLean, 14 Nevins St., Brooklyn, N. Y.; S. Stewart, Nebraska City, Neb.; T. J. Turner, Columbia, Mo.; C. E. Hollingsworth, La Salle, Ill.; J. F. Winchester, Lawrence, Mass.

*Local Committee of Arrangements*—S. S. Baker, Chairman, 901 Jackson Boulevard, Chicago, Ill.; R. J. Withers, 2537 State St., Chicago, Ill.; G. W. Pope, 2537 State St., Chicago, Ill.

#### PROGRAM.

*Monday, October 16, 1893.—Special Committee Meetings.*—10 A. M., Special Meeting of Local Committee of Arrangements. 11 A. M., Special Meeting of International Committee. 1 P. M., Special Meeting of the Comitia Minora.

*Tuesday, October 17, 1893.*—8.30 A. M., Regular Meeting of the Comitia Minora. 10 A. M., Annual Meeting convened.

*Roll Call.*—Address of welcome to the members by President W. L. Williams, Bloomington, Ill. Address of welcome to the visitors. Reception and consideration of report of Comitia Minora. Report of Committee on Honorary Members.

*Unfinished Business.*—1 P. M., Adjournment for lunch. 2 P. M., Reconvened.

*Reports of Committees.*—Special Committee on International Meeting; Committee on Intelligence and Education; Finance

Committee; Committee on Diseases; Prize Committee; Committee on Army Legislation; Publication Committee; Special Committee on Incorporation; Secretary's report; Reports from Assistant (State and Foreign) Secretaries.

*Reading of Papers.*—"Millet Disease of Horses," Dr. T. D. Hinebauch, Fargo, North Dakota; "Biliary Hepatitis in Cattle" (Pictou Cattle Disease), Dr. Wyatt Johnston, Montreal, Canada.

*Wednesday, October 18, 1893*—9 A. M. to 1 P. M., popular meeting under the direction of the World's Fair Auxiliary Congress. "Horseshoeing," Drs. Pearson and Huidekoper; "Psychology of Domestic Animals"—Part 1st, Historical Introduction; part 2d, Scientific part; part 3d, the Conclusion and Theses, Dr. Oloff Schwartzkopf, St. Paul, Minn. "Genus *Hymenolepis* in Rats," Dr. S. E. Weber, Lancaster, Pa. "Has Contagious Pleuropneumonia been entirely eradicated from the United States," Dr. J. W. Gadsden, Philadelphia, Pa. 1 P. M., Adjournment for lunch. 2 P. M., Discussion of reports of committees.

*Reading of Papers.*—"Fistulæ," Dr. M. H. Reynolds, Keosauqua, Iowa; "New Method of Treating Periodic Ophthalmia by Surgical Interference," Dr. R. H. Harrison, Atchison, Kansas. Election of Officers. New Business. 8 P. M., Reception by the Western Veterinarians.

*Thursday, October 19, 1893.*—Special topic for consideration. 10 A. M., "Veterinary Education," Dr. A. Liautard, Chairman. This will be considered under the following head: 1st, Veterinary education as it was; 2d, Veterinary education as it is; 3d, Veterinary education as it ought to be. Discussion of Veterinary education. 1 P. M., Adjournment for lunch. 2 P. M., Reconvened.

*Reading of Papers.*—"Swine Plague and Hog Cholera," Drs. W. H. Welch and A. W. Clement, Baltimore, Md. 6 P. M., Adjourn.

*Friday, October 20, 1893.*—Special topic for consideration; 10 A. M., "Animal Food," Dr. E. E. Salmon, Chairman; 1st, The measures necessary to keep meat-producing animals free from dangerous diseases prior to marketing; 2d, Meat inspection from the standpoint of public health; 3d, Meat inspection from the standpoint of national economy. Discussion on animal food. 1 P. M., Adjournment for lunch. 2 P. M., Reconvened; Tuberculosis Committee, Dr. A. W. Clement, Chairman; 1st, Nature and extent of the disease; 2d, Means of controlling the disease; 3d, Practicability of its eradication from our meat and milk producing animals. Discussion of Tuberculosis. Discussion of papers and reports of cases. 7 P. M., Banquet.



The programme which has been arranged by the officers of the Association has but one fault, and that is that it offers so much of interest and so many valuable subjects that time can scarcely be expected to be found in which to receive them, and still less to consider them as they deserve. But this is more than counterbalanced by the creditable labor which the program shows has been done, and the other original work which will be presented can soon be placed in type and studied at leisure later by one's own fireside, where it can be digested, and the good and the bad be separated for approval and criticism, in further writings and discussions at future meetings. Each and all, the delinquents most of all, owe their support to and courteous recognition of the works of those who have been faithful to the interests of all.

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#### TREATMENT OF WOUNDS BY IATROL.

In the case of a five-year-old mare, suffering from a severe cut on forefoot, caused by being caulked, I sprinkled the wound thoroughly once a day with Iatrol, and kept it bandaged. In four days it has entirely healed by first intention, and the hair grew again so that you could not discover that the foot had been injured. Since then I have used it in my many other cases of wounds, and invariably with good results. I consider it a most valuable antiseptic preparation for veterinarians, and had had such excellent results from its use that I should like to hear reports upon it from other practitioners.

E. D. HAYDEN, V. S.

## SOCIETY PROCEEDINGS.

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*Pennsylvania State Veterinary Medical Association.*—The ninth annual meeting of the Pennsylvania State Veterinary Medical Association was held in the College of Physicians, Philadelphia, March 7th. The Association was called to order at 10:30 A. M., Dr. Hoskins in the chair.

On roll-call the following members answered to their names: Allen, Custer, Du Bois, Ferley, Formad, Gladfelter, Glass, Goentner, Harger, Hart, Bartholomew, Helmer, Hoffman, F. F. Hoskins, Keelor, Keil, Knight, Kooker, Lusson, Magee, Michener, J. C. Nunan, Pearson, Raynor, G. B. Raynor, Thos. B. Raynor, Jas. B. Raynor, John B. Reinhart, Ridge, Sallada, Schaufler, Sturge, Timberman, Weber, Webster and Zuill. As visitors: Drs. John Marshall, Dean Vet. Dept. Univ. of Pa.; W. B. Atkinson, of State Board of Health; Jas. B. McAnulty, John Adams, E. Mayhew Michener, W. J. Hinds, M. E. Conard, W. H. Fry, W. B. E. Miller and a number of students Vet. Dept. Univ. of Pa.

The minutes of the semi-annual meeting were read, and, with a slight correction, adopted.

The President's report, reviewing the work of the Association for the past nine years, and congratulating the members on the volume of work performed, the high place attained and the bright promises of the future, was interesting and instructive.

The election of officers resulted in the selection of President, W. Horace Hoskins; first Vice-President, Dr. Leonard Pearson; second Vice-President, Dr. Jas. B. Rayner; third Vice-President, Dr. Z. S. Keil; Recording Secretary, Dr. Robt. Gladfelter; Corresponding Secretary, Dr. W. H. Ridge; Treasurer, Dr. John R. Hart. Board of Trustees: Dr. S. J. J. Harger, Jas. Sallade, J. C. Michener, W. S. Kooker, Leonard Pearson.

The following list of applicants were then read and referred to the Board of Trustees: R. A. Dunn, D.V.S.; A. V. C.; Titusville, Pa.; W. H. Ridge, voucher. A. O. Cawley, D.V.S.; A. V. C.; Milton, Pa.; W. H. Ridge, voucher. B. L. J. Bear, V.M.D.; V. D. Univ. of Pa.; York, York Co., Pa.; W. H. Ridge, voucher. Geo. A. Smith, V.M.D.; V. D. Univ. of Pa.; 16th and Bainbridge Streets. Phila., Pa.; W. H. Ridge and Leonard Pearson, vouchers. E. Mayhew Michener, V.M.D.; V. D. Univ. of Pa.; Colmar, Pa.; W. H. Ridge, voucher. Chas. A. Dohan, V.M.D.; V. D. Univ. of Pa.; Darling, Delaware Co., Pa.; W. H. Ridge, voucher. Chas. M. Cullen, V.M.D.; V. D. Univ. of Pa.; 4317 Lancaster Avenue, Philadelphia, Pa.; W. H. Ridge, voucher. John J. Maher, V.M.D.; V. D. Univ. of Pa.; 1514 Marshall Street, Philadelphia, Pa.; W. H. Ridge, voucher. M. E. Conard, V.M.D.; V. D. Univ. of Pa.; West Grove, Pa.; W. H. Ridge, voucher. Horace P. Keely, V.M.D.; V. D. Univ. of Pa.; Schwenksville, Pa.; W. H. Ridge, voucher. David Martin, V.S.; McKeesport, Pa.; Jas. A. Waugh voucher. J. Heckenberger, V.S.; Ontario; Catasauqua, Pa.; W. H. Ridge and John C. Foelker, vouchers. Wm. A. Heckenberger, V.S.; Ontario; Catasauqua, Pa.; John C. Foelker and W. S. Kooker, vouchers. Harry D. Entrikin, V.M.D.; V. D. Univ. of Pa.; Kennett Square, Pa.; W. H. Ridge, voucher. S. D. Larzelere, V.M.D.;



V. D. Univ. of Pa.; Jenkintown, Pa.; W. H. Ridge, voucher. C. Lintz, V.M.D.; V. D. Univ. of Pa.; Chester, Pa.; W. H. Ridge, voucher. F. M. Kain, D.V.S.; A.V.C.; York, York Co., Pa.; W. H. Ridge, voucher. Frank L. Smith, V.M.D.; V. D. Univ. of Pa.; 2027 North 13th Street, Philadelphia, Pa.; John R. Hart and W. H. Ridge, vouchers. Guildin R. Hartman, V.M.D.; V. D. Univ. of Pa.; 2130 North 4th Street, Philadelphia, Pa.; John R. Hart and W. H. Ridge, vouchers. Dr. J. J. McCarthey, V.S.; Ontario Vet. College; vouchers, J. W. Sallada and W. H. Fry; Pine Grove Mills, Pa. Joseph Houldsworth, V.M.D.; V. D. Univ. of Pa., Philadelphia, Pa.; voucher, W. H. Ridge. Wm. J. Tomlinson, D.V.S.; Am. Vet. College; Williamsport, Pa.; vouchers, W. Horace Hoskins and Robt. Gladfelter. Jas. T. McAnulty, V.S.; Philadelphia, Pa.; voucher, W. H. Hoskins. W. B. E. Miller, D.V.S.; Am. Vet. College; Philadelphia, Pa.; vouchers, W. H. Hoskins and Thos. B. Raynor.

A recess was then taken, that the Board of Trustees might convene to examine the applicants.

On reconvening, the Board recommended for favorable action: Drs. Dunn, Bear, Smith, Geo. A. Michener, Dohan, Cullen, Maher, Conard, Keely, J. Heckenberger, Wm. A. Heckenberger, Entrikin, Larzelere, Lintz, Kain, Frank L. Smith, Hartman, Houldsworth, Miller and McCarthey. The Board unfavorably recommends: Drs. Fry, McAnulty and Martin; and laid over for further consideration the applications of Drs. Tomlinson, Cawley and Fox.

A motion to dispense with by-laws and elect by acclimation was carried, and those favorably recommended were, on motion, declared elected.

The President introduced the new members who were present.

The Corresponding Secretary's report followed, containing much information relative to the work of the past six months; calling brief attention to the new local veterinary societies in the Wyoming Valley; and, among many other valuable points, jogging the faulty memories of many of the members for their negligence in not replying to and acknowledging communications from the Secretary's office.

The Treasurer's report showed exceedingly heavy expenditures for the year; and though the balance was on the wrong side, a large income from the members had been received, and never in the history of the Association were there so few delinquents as at present.

Under unfinished business, the following amendments were adopted:

1st. That on and after the year of 1893 the dues of this association shall be two dollars, to be made in semi-annual payments.

2d. Any member in arrears for his initiation fees or dues for a period of eighteen months, shall receive two quarterly notices of said arrearage, and in failing to liquidate the same shall be reported to the Association by the Treasurer for expulsion.

Under new business, Dr. S. J. J. Harger proposed that this association place itself in sympathy and work with the National Association in the proposed International Congress. After much discussion a motion prevailed that the chair appoint a committee of nine to represent this association in completing arrangements for our members at Chicago, performing any duties assigned our organization, or preparing to fulfil any part of the program toward making successful this coming Congress.

The subject of participating in the proper reception of foreign visitors, delegates or members of the profession from abroad, in conjunction with committees from other States and local associations was suggested by Dr. Pearson, and after considerable discussion it was moved and adopted that the chair appoint a committee of

nine to receive and entertain, during their trip through our State, all foreign delegates to our Congress.

Under the above resolutions the President appointed the following committees :

*Committee on International Meeting.*—Dr. S. J. J. Harger (Chairman), W. S. Kooker, L. O. Lusson, Alex. Glass, Jas. B. Rayner, C. T. Goentner, J. C. Foelker, Robt. Formad and J. B. Irons.

*Committee on Entertainment of Foreign Delegates.*—Drs. Leonard Pearson (Chairman), Thos. B. Raynor, W. L. Zuill, W. B. E. Miller, J. Timberman, J. Helmer, Jas. A. Waugh, J. C. McNeil, Chas. Schaufler.

Reports of committees being in order, the first one called being on legislation. Chairman Kooker reported results of prosecutions at Washing, Pa., under the veterinary act, together with the proposed act to secure a pure, wholesome and unadulterated milk supply, and to provide for licensing milk producers and milk venders, and for the appointment of Milk and Dairy Inspectors in the State, together with several amendments to existing acts pertaining to the milk and meat supply of our commonwealth. (*Vide, fol. 266.*)

Chairman Weber, of the Committee on Intelligence and Education, then read one of the most interesting, instructive, incisive and important ever produced for the association to consider, embodying many special points and suggested avenues of labor for the profession to enter upon. (*Vide, fol. 266.*)

Chairman Harger, of the Committee on Sanitary Science and Policy, presented a brief report, noting many new discoveries and referring to the present experiments in detecting glanders and tuberculosis and the growing theory in the contagiousness of tetanus.

The Committee of Arrangements then announced that the Philadelphia veterinarians had procured sufficient seats at the Broad Street Theatre for all those in attendance, and were very anxious to have all present. After some minor business the meeting adjourned until 10 A. M. the following day.

*Pennsylvania State Veterinary Medical Association.*—The second day's session was convened at 10:15 A. M. President Hoskins in the chair.

On roll call—Drs. Allen, Bachman, Bartholomew, Benner, Ferley, Formad, Gladfelter, Glass, Goentner, Harger, Jno. R. Hart, Helmer, F. F. Hoffman, Hoskins, Keelor, Keil, Kooker, Lusson, Magee, J. C. Michener, Minster, Nunan, Pearson, Geo. B. Rayner, James B. Rayner, Thomas B. Rayner, John B. Rayner, Reinhart, Ridge, Ross, Sallade, Schrieber, Timberman, Tintsman, Weaver, Weber, Webster, Cullen, Conard, Larzalere, Entrekin, Lintz, Houldsworth and Miller.

As visitors—Dr. William Dougherty, Baltimore, Md., of the Maryland State Veterinary Medical Association; Dr. H. P. Eves, Wilmington, Delaware, delegate from Keystone Veterinary Medical Association; Dr. E. O. Shakespeare, late of the City Board of Health; Dr. James McAnulty, Dr. Leo Breisacher, Dr. M. W. Drake, Dr. N. M. Drake, and a number of students from V. D. University of Pennsylvania.

The President appointed the following delegates to the various Veterinary Associations in adjoining States: To the New Jersey State Veterinary Medical Association—L. O. Lusson, R. G. Webster and Walter R. Hart. To the Veterinary Medical Association of New Jersey—Drs. James B. Rayner, W. S. Kooker and P. M. Minster. To the New York State Veterinary Medical Association—Drs. J. H. Timberman, C. C. McLean and J. B. Irons. To the Maryland State Veterinary Medical Association—Drs. S. E. Weber, W. H. Ridge and Leonard Pearson. To the United States Veterinary Medical Association—Drs. J. C. Foelker, Geo. B. Rayner and John R. Hart.



Under discussion of reports, Dr. E. O. Shakespeare was called upon by the Chair to consider that part of the Legislative Committee's report pertaining to milk legislation. He addressed the Association at some length, answering every argument that had been advanced against the proposed law, touching upon the standard of quality as to solids; as to reduction by water and separator slop; the penalties of violation; the question of milk supply and the unfairness of many analyses; the wisdom of allowing the sale of skim milk and many other well-taken points, handling them all in an earnest, careful and familiar manner, gratifying and encouraging all who were present. After extending him a cordial vote of thanks for his interest and attendance, the milk bill and proposed amendments to other laws on the food question were unanimously indorsed.

Under the discussion of the report of Committee on Intelligence and Education, it was on motion approved that a committee of three be appointed by the Chair to draft suitable resolutions condemning the new two years' school at Washington, and extending congratulations to the American Veterinary College for its adoption of an obligatory three years' course. The Chair appointed the following committee—Chairman, Leonard Pearson, S. E. Weber and J. C. Michener. Said Committee subsequently reported the following draft of resolutions:

Resolutions adopted at the annual meeting of the Pennsylvania State Veterinary Medical Association, Philadelphia, March 8th, 1893:

WHEREAS, Some of the officers of the Bureau of Animal Industry have established a veterinary school in Washington, which is poorly equipped and requires but two years' attendance upon instruction; and

WHEREAS, It is the opinion of this Association that all colleges awarding the degree of veterinary surgeon should give a course extending over at least three years; be it

*Resolved*, That we greatly regret the action of these officers and feel that they are doing the veterinary profession in this country an injury and are retarding the progress of veterinary education; be it further

*Resolved*, That a copy of these resolutions be sent to the honorable Secretary of Agriculture and to the Chief of the Bureau of Animal Industry.

#### SECOND RESOLUTION.

WHEREAS, Certain veterinary colleges have, to their own financial injury, adhered to three-year courses of instruction and others have discarded the old two-year course and now require of their students three years' attendance; and

WHEREAS, It is only through self-sacrificement of this sort that the cause of veterinary education can be advanced; be it

*Resolved*, That we commend these colleges having a curriculum covering three years, and also the American Veterinary College which has recently lengthened its course to this standard.

(Signed)

LEONARD PEARSON,	} Committee.
S. E. WEBER,	
J. C. MICHENER,	

At this point letters of regret were announced from Drs. C. P. Lyman, Isaiah Michener, D. C. Stanton, A. Liautard, C. R. Good, J. C. Foelker, Thos. J. Edge, and many others.

Under discussion of the Secretary's report, he was directed to remove from the rolls Drs. C. J. Blank, of Buffalo, on the ground of non-residence, and J. C. Thompson. To procure two hundred copies of Constitution and By-Laws.

It was further recommended that the Board of Trustees be requested to con

vene an hour earlier, so that the bulk of business may be disposed of before the regular session convenes.

The Secretary was requested to comply with the desire of Dr. A. H. Derney, a non-resident, who wished to recall his name.

The discussion of the Treasurer's report, it was decided to have the following names stricken from the roll:

Drs. C. A. Miller, S. K. Hoffman and A. F. Schrieber. Subsequently, on payment of initiation fee and dues, Dr. Schrieber was reinstated. All bills of Secretary and others were referred to an Auditing Committee, consisting of Thos. B. Rayner, W. S. Kooker and S. J. J. Harger, after which adjournment for lunch.

The first paper presented to the Association was by Prof. R. S. Huidekoper, of New York City, entitled "Agricultural Shows, Judges and the Veterinarian," which was listened to with the most intense interest and edification, and proved to be a paper of exceptional merit, strength and importance, and suggested a new field of labor for the veterinarian to fill that gives great promise of strengthening them as a profession in the eyes of our people throughout the entire country. So carefully and thoroughly was the paper prepared, and so wholly new its character, that its completeness forbid its discussion, and the Association could only most generously thank the author for his kindness in preparing it for the meeting, with the desire that our Association should give it the publicity it should command (*a*).

The second paper, read by Dr. J. Curtis Michener, on "Open Joints," proved a short, terse article on this topic, specially considering his plan of treatment. The paper was afterwards discussed and many questions were asked in regard to the result of the plan of treatment outlined (*b*).

This paper was followed by one on "Fungus *Hæmatodes* in Cattle and Horses," by Dr. James A. Waugh (*c*). He being absent from the meeting, the paper was read by the Secretary. This was followed by a paper on "Acute Toxic Anemia," with the reports of some animals dying from this cause, by Dr. Jacob Helmar, of Scranton (*d*). This paper proved to be of exceptional interest, and was listened to with a great deal of pleasure by all present. His investigation of his case had been of the most thorough character, and the entire history of the development, progress, results and probable origin of the disease was prepared to a state of completeness that won for the author the admiration and approval of all who had the pleasure of listening to his paper.

This paper was followed by one by Dr. Leonard Pearson, continuing the subject of "Tuberculosis" and the results obtained by the use of tuberculin as a diagnostic agent. Some other important and valuable statistics were thus added to what he had placed on record some six months before, and all pointing to the increased value of tuberculin for the detection of tuberculosis in the bovine species. He exhibited, in conjunction with his paper, several specimens that had been obtained from cattle where the symptoms had been peculiarly interesting and somewhat obscure. His paper elicited much interest and brought forth many inquiries that exhibited the general interest shown by the veterinarians in the consideration of this important subject.

As a contribution in connection with the paper of Dr. Pearson, Dr. W. B. E. Miller of the Bureau of Animal Industry, chief examiner of cattle for foreign shipment at the port of Philadelphia, and who with his corps of assistants were continually seeking for evidence of the existence of tuberculosis among the animals selected for consumption as food in Philadelphia, reported the results of these investigations for the past year, which shed much light upon the healthfulness of the beef supply at this centre.

(*a*). *Vide*, fol. 129.  
(*b*). *Vide*, fol. 160,

(*c*). *Vide*, fol. 156.  
(*d*). *Vide*, fol. 150.



This closing the list of papers, the remaining short time of the meeting was thrown open for reports of cases, one of which, reported by Dr. W. Horace Hoskins, was a case of enormous calculi of both kidneys of a Great Dane bitch. The entire structure of one kidney had become entirely broken down and the walls of the organ, greatly distended, had simply become the surrounding envelope of an enormous cyst, containing the calculous deposits; the other had still, to a certain extent, maintained its shape and normal size and containing within an extremely large deposit. The animal had died from uræmic poisoning, indicated principally by great depression of all the vital forces, profound loss of appetite, great lethargy, but never evincing any evidence of acute pain or suffering.

The place for holding the semi annual meeting was then brought up for consideration and resulted in the selection of Scranton. A hearty vote of thanks was then tendered to all those who had contributed to the interest and pleasure of the meeting through the papers and reports which had been submitted. The seating of the newly elected officers then took place, and a vote of thanks to the officers of last year was then accorded, after which the meeting adjourned.

DR. ROBERT GLADFELTER, *Recording Secretary.*

W. HORACE HOSKINS, *President.*

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## COMMITTEE REPORTS.\*

### *Committee on Legislation.*

Mr. President and gentlemen:—The Committee on Legislation beg leave to report that since our semi-annual meeting we have had a suit brought before the courts of Washington County, by one of our committee, against Dr. Rogers, of Washington, Pa., for false registration, having registered as a graduate of a college which never had an existence as a veterinary college, nor ever issued a diploma conferring the veterinary degree. The costs in the suit were equally divided between the prosecutor and defendant on the ground of limitation, the time between the registering and the suit being over two years. The committee suggests the inadvisability of bringing any more suits unless they are plain and very recent violations of the law.

Lawing is very expensive, and money thus expended might be used in the publication of literary matters that would be of more importance and benefit to the profession. The committee expended sixty-five dollars in the Washington County courts. We would recommend the earnest support of the following bills and amendments now before the Legislature, or in contemplation, and hope that every member will take a personal interest in the work, not only in his own county or district, but will work with veterinarians in other counties, or with the representatives direct, and keep our Corresponding Secretary posted in regard to what you are doing and the result of your efforts.

W. S. KOOKER,

THOS. B. RAYNER.

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### *Report of Committee on Intelligence and Education, by Dr. W. E. Weber, Chairman.*

Since our last meeting there has been evident increase of feeling on the part of members of our profession, touching upon improvement in the standard of education in that department of medical science in which we are most directly interested. The concensus is for a class of men better equipped than heretofore for the duties de-

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\*Read before the annual meeting of the Pennsylvania State Veterinary Medical Association, March 7th, 1893.

volving upon them as physicians for the faithful creatures in our care that are unable to make known to us in words their needs as sufferers, as well as other branches of the science. This better equipment, of course, means better rudimentary education, supplemented and strengthened by scientific training in a course which, according to sound thought, should not be ended until the student is thoroughly qualified to enter upon his career as a veterinarian.

It is claimed by some—and with justice—that no man should be sent forth to practice as a veterinarian unless he has proved not only that he has mastered the details of his profession, but that he has a pride in it, and is actuated by a desire and a determination to advance it. In other words, that the veterinarian, like any other true scientist, should be an enthusiast.

The student of veterinary science should be an enthusiast, as without doubt he should be a lover of animals and in full sympathy with them. It is not too much to say that the most successful veterinarian, all other things being equal, is he who has studied the habits of animals, has learned their peculiarities, has become versed in their moods, and at all times feel kindly towards them. We all know the magnetic influence of the physician upon his human patient; we know that when the sufferer feels that his doctor is in full sympathy with him, the patient has a much better chance to recover from his ailment than if between him and the medicine man there were no bond stronger than a porous plaster and a greenback. You may call the good effect the effect of imagination, if you will, or give it any name you please, but the effect is there all the same. It is just so in the case of brute patients, and no observing veterinarian will deny it.

There are now some twenty regularly chartered veterinary schools and colleges in the United States and Canada, but there are a number of institutions ostensibly veterinary schools, which, in great part, are not legitimately conducted. I do not here mean to say that they are not conducted according to the laws enacted for the government of such institutions. As a general thing, they are founded and managed not for the benefit of veterinary students, but mainly in the interest of individuals whose prime object is self-aggrandizement, especially in the direction of money-making. A large majority of these offer a complete course of instruction after an attendance of two years. Now, notwithstanding the fact that until a comparatively recent period, nearly all the schools required but a two years' course to complete an education in veterinary science, all our best practitioners knew that it was impossible to gain a thorough knowledge of it in so short a term. So, as the influence of the profession increased, the wisdom of its leaders began to have its effect. Their protest against ramshackle methods was hearkened to; when they gave cogent reasons why the acquirement of instruction in veterinary principles required more time than was devoted to it, men weighed those reasons and did not find them wanting, and at last the leading schools extended their term to three years.

The good result of this praiseworthy action is already apparent. The class of students sent forth from the schools is of a higher grade than ever before, and their equipment is immeasurably better than it was when the curriculum was run through from title page to colophon in little more time than should have been devoted to the mere alphabet of the science.

That there has been no falling off in the number of students graduating with full honors from these colleges is shown in the fact that in all of these colleges whose term has been extended, the list of matriculants has regularly increased; although the expense to each student is one-third greater than it was when the



diploma could be secured after only two years of work. A few remarks from a distinguished colleague (Dr. Austin Peters), who was Chairman of the Committee on Intelligence and Education of the United States Veterinary Medical Association in 1890, may here be quoted as being directly upon this subject :

“ In 1863, when this association was first organized, it consisted chiefly of men who were non-graduates ; there were very few members of the association who were graduates of veterinary schools, because there were no veterinary schools in the country from which they could graduate, and the few having diplomas obtained them by pursuing a course of studies abroad

“ Yet these non-graduates were, as a whole, honorable, conscientious men, good practitioners of their profession ; they were fairly well read, and enjoyed the respect and confidence of the communities in which they lived. But a change has gradually taken place in the *personnel* of our association. Many of the old non-graduates have passed away and but a few remain ; and the numbers who have joined us of late years have all been graduates of veterinary colleges. To-day it would be an impossibility for a non-graduate to become a member of our body.”

Had Dr. Peters been writing this in 1893 he could have had the pleasure of stating the wise action of that body in requesting still more from its applicants for membership, in that it now even requires a man to be a graduate of a school having a curriculum extending over a course of studies of not less than three years. A most progressive step in the advancement of our profession.

He further says : “ This change, however, was brought about in a great measure by these non-graduates themselves. . . . These men asked for something better and they got it. The question now propounds itself to us, shall we be satisfied with our veterinary schools as they are, or shall we not, in this great age of progress, ask for something better—a longer, more thorough course of study, with a higher educational qualification for matriculation, and a higher standard of graduation than at present prevails ? ” Your committee would recommend that the members of this association recognize the action taken by the United States Veterinary Medical Association in adopting the amendment which was so unanimously carried at their last meeting in Boston, by doing something towards passing a like amendment, which is as follows :

“ ARTICLE I.—Any applicant for membership shall submit his name upon one of the association’s application blanks, duly vouched for by one or more members of the association, or by the resident State Secretary of his respective State. He shall be a graduate of a regularly organized and recognized veterinary school, which shall have a curriculum of at least three years, of at least six months each, specially devoted to the study of veterinary science, and whose corps of instructors shall contain at least four veterinarians. If of a medical school, a similar curriculum as to time shall prevail.”

This amendment does not apply to matriculants of the year 1892, nor shall it apply to applicants who were college matriculants prior to its passage.

There is no act on the part of veterinary medical associations that can do more towards stimulating the cause of improvement in veterinary educational matters in America, than the passage of such requirements for admission. It is with just pride that we hail the announcement of the American Veterinary College of New York, that on and after 1893 her course will be an obligatory one of three years. On the other hand, it is with extreme regret and disappointment that our attention is drawn to the fact, that there has recently been established at the Capital of the Nation a veterinary college whose course of study is but two years. When we consider that

this college is under the protecting wing of the Government Bureau of Agriculture, that its faculty is composed of eminent men who have always advocated "a longer, more thorough course of study, with a higher educational qualification for matriculation, and a higher standard of graduation than at present prevails," what will we have to say about the necessity of providing safeguards against the admission of the two year graduates as members of this association? A two year course does not provide for a graduate, higher educational qualifications. I agree that "a good preparatory course for the future veterinarian is to attend one of our agricultural colleges;" but the preparatory course does not complete the student's equipment, nor does a two years' course in any veterinary college in the land.

The question. "Shall we be satisfied with our veterinary schools as they are?" is one that should be as carefully considered to-day as though it had reference to a date twenty years in the past. We should not be satisfied with them so long as it is possible to improve them; and that there is plenty of room for improvement is a fact as patent as that the improvement is needed.

It is time now for a veterinarian entering upon the duties of his calling, to come thoroughly equipped for his work; but where is the place to which he can turn for such thorough equipment? At one school he can be supplied with the rudiments of an education; at another he can learn to treat, with some degree of skill, diseases of the horse; in this college he can become a good surgeon; in that he can be fitted out with all the adjuncts of the science; while there are other institutions in which he can gain a smattering of everything pertaining to his profession, simply by listening to a series of lectures, delivered in some cases by "professors" whose knowledge of veterinary science is confined to the text-books from which they quote with refreshing liberality. Such schools will exist in spite of all the best efforts of the profession to abolish them; but it is in our power to mitigate the evil of their existence; and that power lies in our ability to *taboo* them—to ignore them—by refusing absolutely to recognize their alleged graduates as legitimate members of the veterinary profession, and consequently debarring them from the privilege of identifying themselves with this or any other standard association devoted to the interests of veterinary science. If the State and local associations follow the precedent set apart by the United States Association, some good towards the springing up of institutions of low standard must be brought about. We must become stronger in our recognition towards the schools whose intentions are for the good of the profession. We must bring about influence to show the student of to-day where he can go to become thoroughly equipped.

The rapid multiplication of veterinary schools still goes on, and those that have been recently organized are, one at Detroit, Michigan; Cincinnati, Ohio; Des Moines, Iowa; Kansas City, Missouri, and the latest one at Washington, D. C.

In reference to the announcement of the organization of this last-named school, we can only say that it is one of the sorest disappointments that could confront the more advanced thought of the profession at this time, to say the least of it. And we hope that the instigators of this new institution will reconsider their action and by the next announcement we may see the Capital of the Nation adorned by one of the standard veterinary schools of the world. There is certainly no other place in this country that can offer better facilities for such a purpose than Washington. It is incumbent upon us to-day, as an association, to denounce the establishment of this two-year school by proper resolutions of condemnation. Much has been said and with just opposition, by the profession since its announcement.

Resolutions showing the disapprobation of the profession have been sent to the



proper United States authorities, as well as the officials of the Bureau of Animal Industry, by the Philadelphia Veterinary Medical Association, the Massachusetts Veterinary Medical Association, the Keystone Veterinary Medical Association of Philadelphia, and the New York State Veterinary Medical Association. It is the duty of the profession in this country to be a unit in trying to bring about the desired result. Leaving the subjection for the consideration of this body to-day, I will return to another subject of improvement in education, namely, the unscrupulous practitioner, by whom we have been long enough impeded. While we acknowledge that there are good and conscientious veterinary practitioners who have assumed the duties of professionals without proper educational equipment, we must regard them as rare exceptions to the general rule and continue to look upon the majority of the haphazard "horse doctors" in the light of charlatans, who should be forced by lack of patronage to throw up their trade and take to something for which they are better fitted by nature, education and experience. Time was, even within the memory of men not yet old, when the human, as well as veterinary, powwow doctor in many Pennsylvania communities; when by blowing his fetid breath upon a wound, and reciting a gibberish abracadabra to the ignorant and awestruck patient, he could make him believe that his ailment was cured, and that by the going down of the next day's sun nature would give proof of the wonder-worker's power by closing up the cruel gap and covering it with an epidermi not only as healthy as an infant's, but as tough as the hide of a bull of Bashan. There are still among us relics of the past who have an abiding faith in the efficacy of the powwow doctor's magic treatment, and would pit one blast of the foul exhalations against all the saving drugs in the pharmacopœa; or one syllable of his meaning less jargon against the *dictum* of the wisest and most humane physician that ever administered paragoric or lanced a gum. But, brethren of the pill and plaster, *where is the powwow man to-day?* Gone, like the unsubstantial vision that has faded, he has "left no wrack behind," except the rack that pinches the conscience of the man who remembers that he once pinned his faith to powwow; and that he believed there was almost divine omniscience in the powwow man's words uttered through a rum-flavored breath. Yes, he is a thing of the past. The bright light of education has fallen upon the shade of ignorance and superstition, and we hope the sun will never again shine upon the powwow-man or any other retrograde barrier, so that his shadow shall not darken the pathway of improvement in any of the branches of medical science.

I am glad to believe that before long the veterinary quack and charlatan will be relegated to obscurity by the same influence.

#### QUACK ADVERTISING IN AGRICULTURAL JOURNALS.

The practice of our so-called agricultural journals, in giving great encouragement to the veterinary quack, is to be denounced; but what shall be said of periodicals like the *Spirit of the Times*, the *Turf, Field and Farm* and the *Horseman*, ostensibly devoted to the improvement and well-being of the horse, which sell columns of space every week to quacks and charlatans for the puffing of their nostrums? And right here let me enter my protest against the weekly publication, in journals such as I have named, of a department under the head of "Veterinary." This department is supposed to be conducted by a reputable veterinarian; but what must be the nature of the information he imparts to correspondents he has never met concerning the ailments of animals he has never seen? Is not this a species of cheap quackery? Is it not dishonest? It is certainly not of benefit to the sub-

scribers of these journals, how much soever it may seem to be a gratuitous service.

These journals—and there are many of them in the United States—are not published in the interest of veterinary science, it is true ; but we have a perfect right to criticise their conduct in this regard, at least. Their advice on subjects pertaining to the diseases of animals is not the kind that should be given, for the reason that it is based upon an indistinct, faulty or absolutely wrong impression on the part of the horse's guardian, who, in a vast majority of cases, must be unprepared to diagnose a disease, and is not able to make plain (in writing) what he has discovered as to the animal's condition. What sort of advice, then, does the literary veterinarian give in answer to the rambling, disconnected and almost unintelligible account of the animal's trouble as set forth in his inexperienced correspondent's letter? What cruel blunders are made by stock-owners of limited intelligence who attempt to carry out the instructions of the pen-and ink practitioner who issues his edict five hundred miles from the patient's stall. Put together the ignorance of the man who asks the advice and the boldness and self-conceit of the man who gives it. Let the two come to a result. Who can estimate the mischief? Take this one case, for example :

A farmer in the northern part of New Jersey had a valuable horse which, about six months ago, went wrong. In his distress the farmer, instead of summoning a competent veterinary surgeon to examine and treat his horse, wrote thus to the desk veterinarian of a well-known New York sporting paper :

“ I have a valuable horse that is rough in his coat, goes lame in one hind leg once in a while, and has a discharge from the nose and sometimes also from the eyes. He has a swelling under the jaw, and the sheath is also swollen. He does not eat well, has a cough and gets weak after working a little while. What do you advise me to do? The pen-and-ink doctor, instead of saying, “Consult a good veterinarian,” gave this reply : “The case you describe is in all probability one of glanders. I should advise you to give your horse at once a purgative—eight drachms of aloes in a ball, and if he gets much weaker he has glanders beyond a doubt.” The foolish farmer, who had received this advice at the expense of his weekly agricultural and sporting paper, gave his horse the prescribed dose, and the animal, which was suffering from influenza and needed all his strength, was purged to death in two days.

Had the penny-wise and pound-foolish farmer secured the services of the nearest veterinary surgeon, instead of depending upon the opinion and advice of a quill-driving snap-chance, he might have saved his valuable horse at the cost of a few dollars, and at the same time learned a valuable lesson in veterinary science.

All that has thus far been said comes directly under that part of the head of education, whose province is improvement.

Now, the *status* of our profession can be elevated and improved by means of prompt and earnest action in the direction already pointed out. Yet something more is needed.

We recognize with something of shame, mingled with our indignation, that there are no sufficient laws in our State protecting our profession. Such laws have been passed, but found inadequate to bring the desired effect ; but amendments are in progress, and we hope, if passed, will be duly enforced, and thus save the public as well as the profession, who are at the mercy of empirics and veterinary tramps, who not only swindle the public and the honest members of our profession, but by their ignorance also lower the profession in the eyes of the untutored world. The peripatetic “horse doctor,” who tramps from stable to stable uttering platitudes in a



jargon more startling, but less intelligible than dog Latin, and treats every ailment with the nauseous compound poured from the one bottle belonging to his medicine chest, cannot, of course, impose upon an intelligent man. His dupes are of the class who need protection from these confidence operators. They are the unfortunates who do not read the papers and are too ignorant to profit by the unhappy experience of other ignoramuses.

There are two means by which these frauds may be prevented. One is to eradicate the evil by driving out the fraud; which can be done by bringing into play the strong arm of the law. But if we could only apply the second means and educate the army of dupes up to a knowledge that these peripatetic practitioners are ignorant empirics and unable to do them justice, the aid of the law would no longer be required.

There are laws in various States to repress this class of practitioners, but are these laws enforced? True, it is not fully as easy for the veterinary quack to practice in 1893 in the *protected* States as it was half a century ago, when there was hardly a veterinary school in the United States, and when the Statute Books were bare of any reference to bogus practitioners. These laws are practically a dead letter—as lacking in life as the plaster model in a dressmaker's window. It behooves the legitimate veterinarian to discuss the question on all its bearings, and let such laws be framed by competent hands and submitted to the Legislature with a plea for their enactment.

Let every honest veterinarian in the interest of his profession, for the protection of the stock-owner and for the safety and better treatment of the dumb victims of the quack's inhumanity and ignorance, *insist* upon the rigid enforcement of those laws.

Let him call attention of the local authorities to each infraction, and demand the arrest of the malefactor and aid in having punishment meted out to him.

The veterinarians are not sufficiently numerous to form a political party, to be sure, but there are 1,000 in the State of Pennsylvania, and they are good members of society; and besides a vote, each one has more or less influence as a citizen, and an educated man, in shaping the political sentiment of his neighbors. This is a fact that members of the Legislature may some time deem of sufficient importance to make a note of.

The importance of co-operation on the part of veterinarians in effecting reforms cannot be overestimated. It should be borne in mind that every reform as pertaining to our profession, its *status*, its advancement, its protection, bears directly upon the welfare of the general public. You cannot act for or against a profession without helping to retard or expedite the progress of the whole community in one direction or another. If you weaken the barriers that keep out the quacks you leave the public at their mercy. If you combine in a movement to make scientific investigations into the prevalence of a disease, you do for the public a service worth millions of dollars, besides providing a safeguard against future plagues which, unchecked, might carry off the greater portion of the live stock in the country, and leave its inhabitants subject to transmitted diseases.

When cholera, smallpox, or any other contagious disease threatens us, we are prepared with the means whereby the approach of the plague may be rendered impossible. To what is this due? To the concerted action of wise, thoughtful, public-spirited physicians, who, without any reference to political bias or personal aggrandizement, move together to bring the law into operation that it may work hand-in-hand with science for the general good.

Every veterinarian should be an active member of some branch of the great Society for the Prevention of Cruelty to Animals, and should use his influence to establish other branches wherever he may see the need of them. This I consider a part of his education, as well as a very necessary part of the curriculum of every member of society, whether a professional or not. In maintaining such societies the veterinarian has a facility possessed by no one else, for he not only understands animals and their needs, but can instruct others as to the best methods of relieving the suffering brute, and in various ways rendering an overworked or wounded animal comfortable. His knowledge enables him to make his sympathy for dumb animals doubly felt and appreciated, and in every community he becomes a benefactor, not only to the brute but to his fellow-man.

Now that all the eyes of America are turned to Chicago to watch the progress in the preparation for the great Exposition, it behooves us as members of a profession acquiring importance with its growth, and holding an honorable place where it was once too generally the object of contempt, to consider what part we are to take in the coming celebration. It has been decided to hold the first International Congress of Veterinary Science there, and no one will deny that it is the duty of every member of this, the Leading State Association of the United States, to be present. The occasion may be, and should be, made the most eventful in the history of our profession. There will be, then, the largest gatherings ever known here or in Europe; the best minds of the profession will be there to aid and encourage us by the interchange of thought; experiences will be brought forth that will increase our knowledge and strengthen our loyalty to a noble calling, and by our presence we will be factors, giving dignity to the effort we make to elevate the standing of our profession.

The 1,800 or more veterinarians in the United States should be there in force, not as mercenary onlookers, but as earnest workers in a field in which the standard of professional worth should be as high as that of any science known to man.

At this International Congress we shall be afforded an opportunity to make an advance in the improvement of medical science that should have been made long years ago. I mean an amalgamation of what we may call human and veterinary medicine, as the practice of the science of medicine for man and the lower animals is so closely related by nature that it is difficult to understand one without a knowledge of the other. The amalgamation may be brought about by arranging the subject matter of the various discourses so as to make them interesting to the medical fraternity, by showing them how intimate are the relations existing between our practice in the stable and the barn and theirs in the bedchamber and the hospital. There is no doubt that the two professions—if two there may be said to be—have been kept assunder without good reason.

To emphasize the suggestion just made, let me quote a few words addressed by Prof. Woodhead, a celebrated physician, at a recent meeting of the National Veterinary Association, in Edinburgh, Scotland. Prof. Woodhead had had some experience as a veterinarian, and a vote of thanks had been tendered him for a paper he had read before them. This is part of what he said :

“I am free to say, from my own point of view, that it has been a great pleasure to me, and a great profit, likewise, to work professionally with you. I have derived a great deal of knowledge from my association with Prof. McFayden, V.S., knowledge that I could not have gained had I not engaged in his kind of work. I have learned to know how close the two professions are, how closely connected are medical science and veterinary science, and I am sure that if you would only meet



more frequently and interchange ideas more freely, it would be of untold advantage to both branches of the healing profession."

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*Pennsylvania State Veterinary Medical Association.*—The semi-annual meeting of the Pennsylvania State Veterinary Medical Association was held in the parlors of the Y. M. C. Association building at Scranton, on September 5th, 1893. The meeting was called to order by the President, Dr. W. H. Hoskins, at ten o'clock A.M.

On the roll call the following members responded: Doctors Benner, DuBois, Gladfelter, J. R. Hart, Helmer, Hoskins, Hooker, Houldsworth, Miller, Pearson, Ridge, Thos. B. Rayner, Jas. B. Rayner, Stanton and Timberman.

The New Jersey Veterinary Medical Association was represented by delegates, Drs. Duston and Lockwood. Letters and telegrams were received from Mayor, Wm. L. Connell, Secretary of Agriculture Edge, and Drs. Zuill, Harger, and Robt. Ward, expressing their regrets for their inability to attend.

The President, Dr. W. H. Hoskins, then read his address. He called attention to the wonderful growth of the City of Scranton, which has practically developed from one industry alone. He impressed upon all the rapid growth in numbers and advance in value of the Veterinary Association throughout the country, and the importance of the coming 30th Annual Meeting of the United States Veterinary Medical Association, and the first Veterinary Congress of America. In severe language he referred to the infamous spoils system which has extended to the Bureau of Animal Industry, and laid the responsibility at the doors of the Veterinarians themselves; he hoped that they would apply the remedy in their own hands before this Bureau is endangered in its existence, even though it has been lessened in its value as a scientific body. He urged the members to use their best influence in guiding young men to the best Veterinary Schools, for the recent rapid multiplication of Veterinary Colleges is no proof of their need or surety of their ability and equipment to discharge their grave responsibilities.

The Secretary read the following list of applicants for membership: Drs. D. B. Fitzpatrick, W. L. Rhodes, H. B. Felton, J. B. Seitter, S. J. Nicholson, M. T. Miller, W. J. Tomlinson, R. J. Fox, A. O. Cawley. The following veterinarians made application at meeting: H. R. Church and H. L. Marsack.

A recess was then held for the Board of Trustees to convene. There being three absentees on Board, the President appointed Drs. Helmer, Timberman and Thos. B. Rayner to fill the vacancies. The Board of Trustees favorably recommended as follows: H. R. Church, D. B. Fitzpatrick, Howard B. Felton, Jos. B. Seittler, S. J. Nicholson, W. T. Miller, H. L. Marsack; they laid over for consideration Drs. Cawley, Fox and Tomlinson, and recommended that they be requested to be present at the next meeting of the Board of Trustees at Philadelphia, in March next. The recommendations of the Board of Trustees were approved, and the new applicants elected by the Secretary's ballot under a suspension of the rules.

The Corresponding Secretary, Dr. W. H. Ridge, gave a brief record of the work of the past six months, noting among other matter the action of Housmann and Dunn, instrument makers, of Chicago, in publishing Dr. S. J. J. Hargers' article read before this Association on Laryngotomy, without crediting the author with the same, or the Association to whom said paper was extended. He stated that our membership had increased by 40 under the present officers, making the

total number to date 112, and further asked that each member bring a new one for our March meeting. The Secretary's report was received and a vote of thanks was extended to him.

The Legislation Committee made a brief report, and some discussion followed as to the wisdom of amending the present Act in regard to Veterinary registration. Delegates to our meeting were asked to address the members, and Dr. Duston of the New Jersey Veterinary Medical Association responded. He regretted that there was not more active, more harmonious work, and a stronger fraternal feeling among the profession generally.

Under the head of Intelligence and Education, reference was made to the Washington Veterinary College, which was continuing its short term of instruction, and was reported as having determined to run it as a money-making institution, and not in the behalf of higher veterinary education. On motion a Committee was appointed to draft suitable resolutions to the Washington College, and also to report in regard to the action of Housmann and Dunn. The Committee subsequently reported the following resolutions:—

*Whereas*, The almost unanimous sentiment of the Veterinary profession demands the professional schools to require of their students at least three years' attendance upon instructions, and to constantly increase their equipments as science demand ;

*And Whereas*, This Association hears with regret that the National College in Washington is to be continued as a two years short term school, with a poor and incomplete equipment ;

*Be it Resolved*, That this Association renews its condemnation of this school, which we think tends to lower and degrade the standard of Veterinary science.

LEONARD PEARSON,  
W. B. E. MILLER,  
JACOB HELMER,

*Committee.*

*Whereas*, The firm of Housmann, McComb and Dunn has printed without authority the article on "Roaring," prepared by Dr. S. J. Harger for this Association, and have used the said article as an advertisement for instruments manufactured by them, and without giving credit to the author or the Association for which it was prepared ;

*Be it Resolved*, That the attention of the Veterinary profession be called to this disreputable act by the publication of this preamble and resolution in the Veterinary Journals.

LEONARD PEARSON,  
W. B. E. MILLER,  
JACOB HELMER,

*Committee.*

Through the Corresponding Secretary, Dr. Thos. B. Rogers offered a paper on castration. The Association, by vote, accepted the same, and accorded the author a vote of thanks.

The Treasurer made a verbal report, and suggested the purchase of a special book to keep accounts of members, and he was authorized to purchase the same.

At one o'clock P.M. the meeting adjourned for lunch. On reconvening at 2.15 P.M., Dr. Helmer read a valuable and suggestive paper on Inflammation of the Internal Structure of the Eye. This was followed by a paper by Dr. Leonard Pearson on "Anthrax," which had an added interest through his recent investigations



of some serious outbreaks in this State and Delaware. Dr. T. H. Timberman, in a paper on "Punctured Wounds of the Foot," recorded some remarkably successful results when the bursar was involved, by the use of chlorid of zinc in mild solution, and careful dressing to close the wound from external influences. Dr. Miller kindly read the paper on castration contributed by Dr. Rogers. The author severely criticised the operation standing, and laid many schirrus cords at its door. He referred to the false claims about "Cryptorchides," citing many cases where they could not be truly termed a ridgling, and it was no trouble to operate.

This was followed by Dr. Ridge on "Dystocia," and the employment of force in these cases. He recorded a number of experiences where extraordinary measures had been used to the great suffering of the animal, and always the loss of the young where they were offering such presentations as made birth impossible, and only the return of the foetus, and its position changed to a normal one, brought an easy birth, and great relief to the parent. His paper was full of valuable practical suggestions.

The discussion of these papers, bringing many interesting points, was taken part in by Drs. Miller, Pearson, Kooker, Helmer, Timberman, Duston, Thos. B. Rayner, and others.

A resolution was then passed that the reports, papers, etc., be given to the "American Veterinary Review," and that arrangements be made in connection therewith for the printing of 350 copies of the same.

A vote of thanks was extended to the Wyoming Valley Veterinary Medical Association for their kindness in caring for the members and arranging for the meeting. A similar vote of thanks was given to those who had made reports and offered papers.

The meeting adjourned at six P. M. At eight P. M., through the courtesy of the Wyoming Valley Veterinary Medical Association, a trip was made into one of the coal mines, which was a pleasant experience to all who had the pleasure of availing themselves of the opportunity. The following morning at 8.30 the members were treated to a trip to Far View, ascending the mountain from Carbondale by a series of 14 plains. It proved a delightful day. A rich view of beautiful scenery, and many pleasant experiences long to be remembered.

ROBERT GLADFELTER,  
*Recording Secretary.*

W. HORACE HOSKINS,  
*President.*

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*California State Veterinary Medical Association.*—A regular meeting of the California State Veterinary Medical Association was held on September 13th, 1893, at the Baldwin Hotel, San Francisco.

The meeting was called to order by the President, Dr. Wm. F. Egan.

Upon roll call the following gentlemen responded: Drs. Egan, Burns, Maclay, Spencer, Sr., Spencer, Jr., Fox, Wadams, Orvis, and Archibald. Visitors present were: Drs. Patterson, Robin, Jackson, Williams, Hagarty and Dalzeil.

The minutes of the previous meeting were read and approved.

The reading of papers, discussions, etc., brought Dr. H. A. Spencer, of San Jose, to his feet with an excellent and instructive paper on Gastro Hysterotomy. The essayist gave the history of the operation, the origin of which dated back before Christ. He then went on to describe the operation in detail, as operated by him on a bitch; he also described his after treatment, etc.

The President then declared a discussion was in order, whereupon Dr. Maclay arose and complimented the essayist on the successful issue of the operation. Drs. Fox, Spencer, Jr., and the Secretary also joined in the discussion, and gave their views on the subject. The discussion was followed by a few well-chosen remarks by the President.

The Secretary was then called upon to entertain the meeting, which he endeavored to do by reading a few notes on an operation witnessed by him. The operation was the Extirpation of a "Tuto-ovarian Cyst." The essayist described the operation as seen by him, giving the after treatment, etc., also giving a short treatise on the cause of the lesion.

The paper was followed by a discussion, in which most of the members participated. The Secretary then brought up a subject upon which he wished to obtain the view of the members. The matter was the treatment of sores which Jacks and Mules are very subject to. He described a case in a two-year-old thoroughbred colt, which he was at that time treating. He gave the methods of treatment which he had applied, with results. Dr. Robin favored the use of Ung. Hyd. Nit. Dr. Williams said that he had had considerable experience with the subject under consideration, and that the most beneficial treatment he had found was Ung. Hyd. Nit. Dr. Spencer, Jr., uses *Phytolacca*, both externally and internally with good success. Dr. Spencer, Sr., claimed to have good results from the use of a paste compound composed of Zinc. Chl., Sanquinaria and flour. Dr. Wadams uses the actual cautery, followed by iodoform dressings. Dr. Orvis said that he never had much success with the disease, but he favored the use of the actual cautery, followed by astringents. The Secretary said that he always advised his clients who were unfortunate in possessing Jacks affected with these sores, to put them in fly-tight loose boxes during the day, turning them out at night for exercise.

The Secretary then proposed the following names for membership : Drs. Paterson, Falkner, Robin, H. Fabbi, Forrest, Williams, Jackson, Hogarty and Dalzeil. The names were ordered referred to the Board of Examiners.

Under the head of new business the Secretary read a communication from the Secretary of the U. S. Veterinary Medical Association, asking the Society to appoint delegates to represent the local organization at the International Congress. The matter was discussed at some length by the Secretary, who endeavored to point out the benefits the Society would receive by sending delegates to the International Congress. He also spoke at some length on the intentions of the National Organization, and the manner in which it intended to benefit the Veterinary profession in the United States. He implored the members of the Society to join the National Organization, and pointed out the advantages they would gain by such a procedure. He said the expenses of joining the National Association were, comparatively speaking, small, and that everyone who joined would be fully repaid in the future.

On motion by Dr. Maclay, seconded by Dr. Spencer, the Secretary was instructed to write to the Secretary of the U. S. Veterinary Medical Association and thank him for his kind invitation ; also to acquaint him with the fact that the society at the present time was in a position financially to accept his invitation, as it had lately gone to considerable expense in legislative matters.

The Secretary then presented a written notice that at the next meeting he intended to move to amend the Constitution and By-laws, as owing to the passage of an Act entitled "An Act to regulate the practice of Veterinary Medicine and Surgery in the State of California," at the last Legislature, some changes in the Constitution and By-laws were necessary. The notice was ordered referred to the Board of Directors.



Nomination for officers for the ensuing year were declared in order by the President. The nominations resulted as follows: For President, Dr. H. A. Spencer; Vice-President, Dr. W. B. Rowland; Secretary, no nomination; Treasurer, Dr. D. F. Fox; Board of Examiners, Drs. Maclay, Egan, Orvis, Rowland, and Whittlesey. Board of Directors, the several officers of the Association. On motion by the Secretary the name of J. C. C. Price was dropped from the roll of membership.

On motion by Dr. Wadams a vote of thanks was tendered to the essayists for the able and masterly manner in which they had entertained the meeting.

The following gentlemen were appointed essayists for next meeting: Drs. Maclay, Orvis and Archibald.

There being no further business before the meeting, it adjourned to meet in Sacramento, on Dec. 13th, 1893.

R. A. ARCHIBALD, D.V.S.,  
Secretary.

*Illinois State Veterinary Medical Association.*—The semi-annual meeting of the Illinois State Veterinary Medical Association was held at Peoria, Ill., Feb. 17th, '93. The meeting was called to order by Pres. S. S. Baker. The roll being called the following members responded to their names:

Drs. A. G. Alverson, S. S. Baker, G. Z. Barnes, G. W. Browning, George Ditewig, C. E. Hollingsworth, C. D. Hartman, J. T. Nattress, J. W. Parkinson, Jno. Scott, N. I. Stringer, H. Thompson, M. Wilson.

Minutes of the previous meeting were read and approved.

Committee on Legislation reported through its chairman, Dr. Baker, on the work done in drafting a bill to be presented to the Legislature, and the sending of letters and petitions to representative live stock men in this and surrounding States and receiving their indorsement to such bill.

Committee on Form of Certificate of Membership was given power to act in selecting and having printed an appropriate certificate.

The following gentlemen's names were proposed for membership: Dr. W. S. Wingate, "Ch. '92," Farmington, Ill.; Dr. R. P. Steddom, "Ont. '86," Galesburg, Ill.

On motion of Dr. Stringer, seconded by Dr. Hollingsworth, the rules were suspended for the time being and the above-named gentlemen elected by acclamation.

It was moved by Dr. Scott, seconded by Dr. Barnes, that the Secretary be instructed to notify all members in arrears asking for their dues. Motion carried.

#### AFTERNOON SESSION.

Meeting was called to order at 2:00 P. M.

Dr. W. W. Giles, "Ch. '92," Eureka, Ill., was proposed for membership and elected by acclamation.

Dr. Ditewig then read his paper on "Remarkable Cases in Practice" Discussion closed on motion.

Dr. Stringer then read his paper on "Strongylus Tetracanthus." Discussion was closed on motion.

Dr. Thompson then presented a paper on "Case Report," discussion of which was closed on motion.

Dr. Scott was then called on for his paper on "Castration," and was followed by Dr. S. S. Baker on "Typhoid Fever in the Horse."

Meeting adjourned until after supper.

Members called to order at 7.30 P. M.

After some further discussion of Dr. Baker's paper on "Typhoid Fever in the Horse," a vote of thanks to the essayists was proposed by Dr. McConnell, and responded to by Drs. Baker and Stringer.

A vote of thanks was also presented the proprietors of the hotel for their accommodations, and the meeting adjourned to come together at the call of the committee in Chicago next November.

MATTHEW WILSON, M. R. C. V. S., *Sec'y.*

MENDOTA, ILL.

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*Kansas State Agricultural College.*—The Kansas Veterinary Medical Association met at Manhattan, March 9th, 1893. The afternoon was spent visiting the State Agricultural College.

The meeting was called to order by President Pritchard. The minutes of the previous meeting were read and approved. Drs. Young and Le May signed the Constitution. Communications were read from Drs. Hunter, Wattles and Nott expressing regrets at being unable to attend the meetings.

Dr. Wattles reported an interesting case of an "equine hermaphrodite." Dr. Wattles also extended an invitation to attend the commencement of the Kansas City Veterinary College.

Dr. Le May gave an interesting talk on the treatment of gunshot wounds in horses, having had considerable experience while at Pine Ridge with his regiment (7th cavalry). He found the most successful method was to treat the wound antiseptically locally, and wait until the ball became encysted or set up suppuration, when it could be removed. He related some very interesting cases.

Dr. Welch, of Salina, reported an interesting case of artificial impregnation of a mare. The semen was caught in a receptacle, mixed with warm milk and by means of a small rubber tube and funnel, was forced into the uterus. The mare was impregnated.

The treatment of herniæ was also discussed thoroughly. Neurotomy was also discussed. The general expression was that the low operation, performed standing, was usually successful, no bad results following. Tenotomy, bulging sole, Demps, pads and rubber-tired shoes were also discussed.

Under the head of unfinished business, the fee bill was brought up, amended and adopted as a general guide to equalize charges throughout the State and for the general information of the practitioner and his client.

The amended fee bill was ordered printed for the use of the members. Dr. L. Orr's resignation as a member of the association was taken from table and accepted.

Under new business a committee, consisting of Drs. Welch, Mayo and Brady was appointed to revise the Constitution and By-Laws and present them at the next meeting.

The association then adjourned to meet at Topeka the Thursday evening of State Fair week in October, 1893.

N. S. MAYO, *Sec.*





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## OBITUARY.

Professor Robert Jennings, V.S., died at Detroit, Mich., January 5th, 1893, aged 78 years. His name will always be closely identified with the early history of veterinary education in America. He acquired a practical knowledge of veterinary science by studying sometime with a veterinary practitioner, and matriculated in the Pennsylvania Medical College, but never graduated; then delivered a series of veterinary lectures to a number of medical students from several medical colleges in Philadelphia during the winter months of 1846 to 1850, and finally founded the Veterinary College of Philadelphia, which was chartered April 15th, 1852. This was the pioneer veterinary college of America, and failed to prove a financial success. The faculty disorganized and the college closed its doors March 3d, 1866, and was succeeded by the Pennsylvania College of Veterinary Surgeons, which was chartered April 11th, 1866. The faculty disbanded and the college ceased to exist after 1870. A number of students were educated and received diplomas from these colleges. He introduced the castrating ecraseur in this country in 1852; organized the American Veterinary Association in 1854, and was veterinary lecturer in Ohio Agricultural College during 1856-7. A series of books on diseases of domestic animals and horse training was prepared by Dr. Jennings from copious extracts from British authors, and proved very useful to live-stock owners in this country. He corresponded with numerous veterinary practitioners, and issued a circular-letter which resulted in the formation of the United States Veterinary Medical Association June 9th, 1863; and this is a fitting and everlasting monument to his memory. A number of interesting contributions from his pen may be found in the early volumes of THE JOURNAL OF COMPARATIVE MEDICINE AND SURGERY. He was a member of the Board of Censors of the Columbia Veterinary College, and at one time took a very active interest in the advancement of the veterinary profession in this country. His son, Dr. Robert Jennings, Jr., is a veterinary practitioner in Pittsburgh, Pa.



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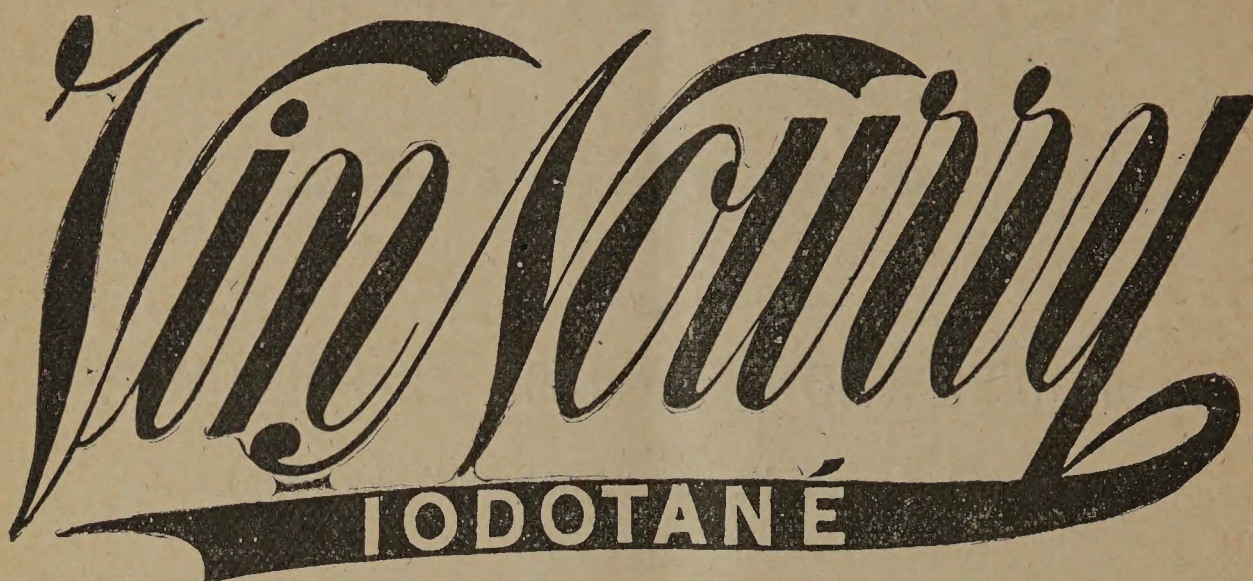
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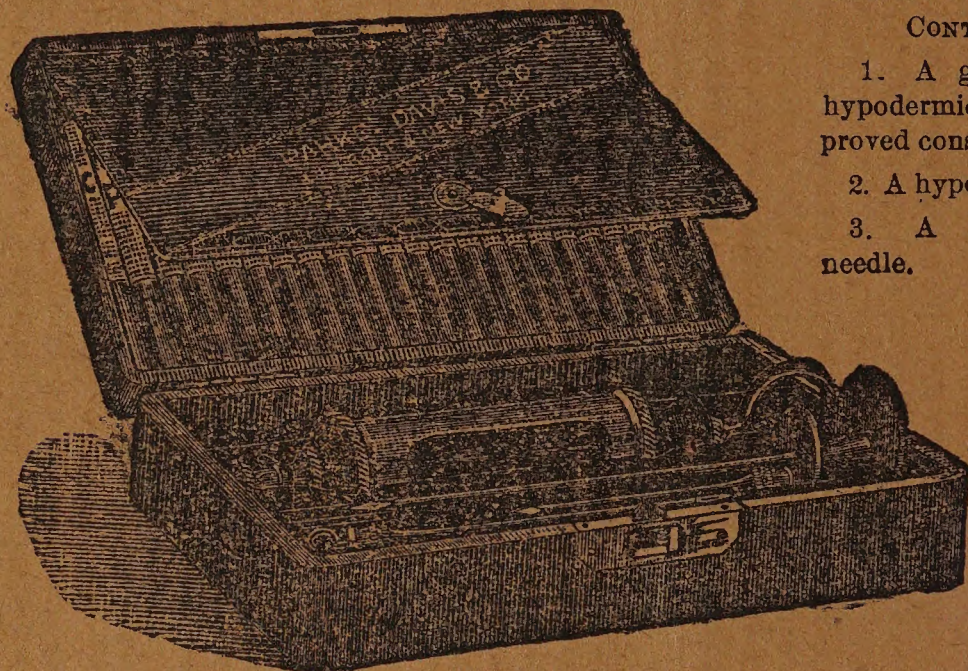
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## WITCH HAZEL AND CHAULMOOGRA OIL.

The distilled extract of witch hazel has long been known to be a valuable remedy applied locally for relieving pain and subduing inflammation in wounds and contusions. Our product will be found of uniform strength and purity.

Chaulmoogra Oil is very largely used abroad for local application in stiffness, lameness and to prevent the development of these conditions after severe muscular exertion, as in hunting or racing.

Complete descriptive circulars and any desired information regarding our products promptly furnished on application.

**PARKE, DAVIS & CO., Manufacturing Chemists, Detroit, Mich.**